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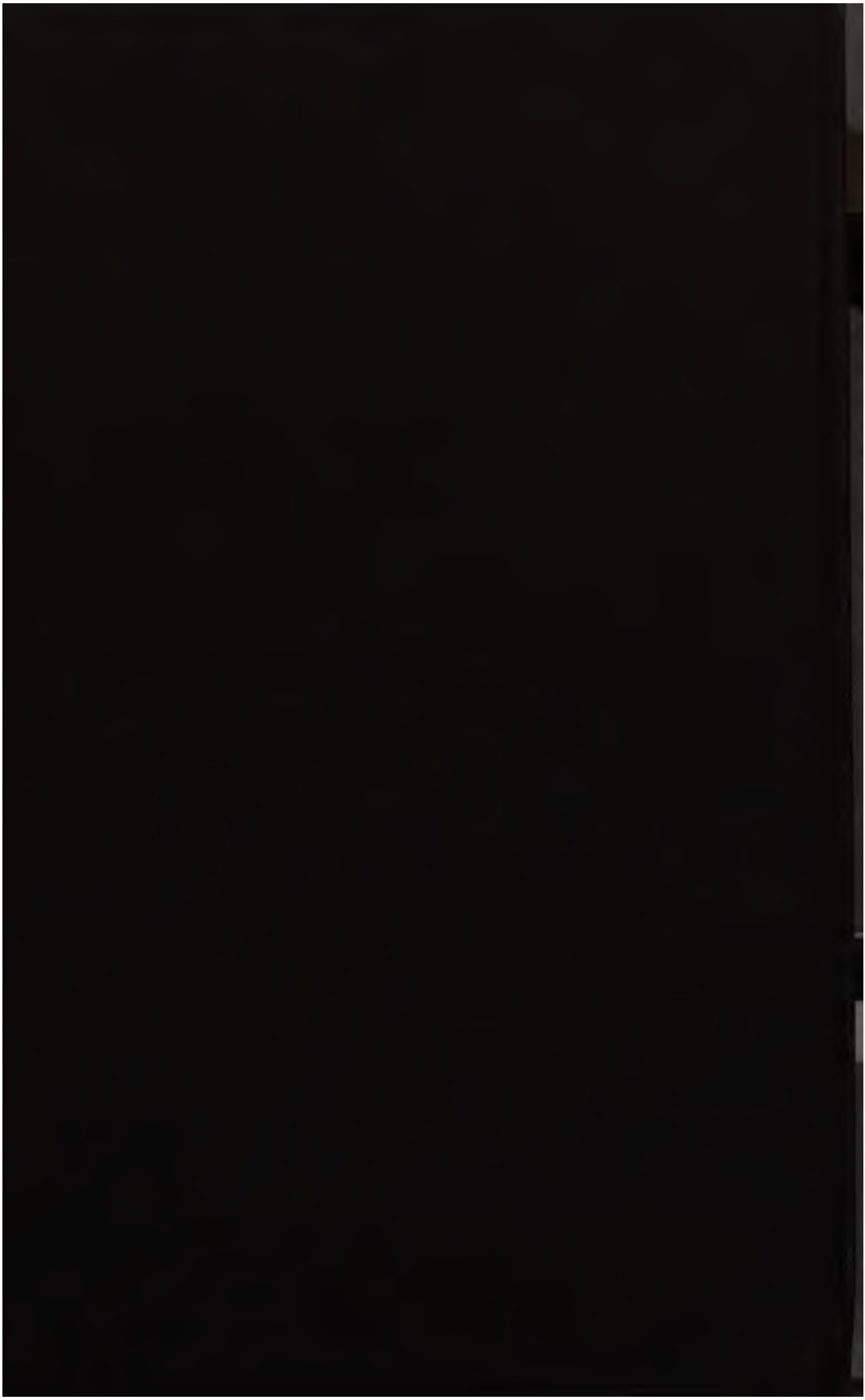

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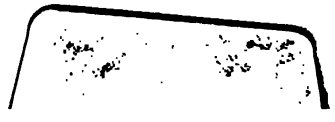

THE

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THE

PATENTEE'S MANUAL

BEING A TREATISE ON THE

LAW AND PRACTICE OF LETTERS PATENT

ESPECIALLY INTENDED FOR THE USE OF

PATENTEES AND INVENTORS

WITH AN

Appendix of Statutes, Rules, and Foreign and Colonial Patent Laws
International Convention and Protocol

BY

JAMES JOHNSON

OF THE MIDDLE TEMPLE, BARRISTER-AT-LAW

AND

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PAST PRESIDENT OF THE INSTITUTE OF PATENT AGENTS

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PREFACE

TO

THE FIFTH EDITION.

SINCE the publication of the last edition of this work, an important change in the Law of Patents has been effected by the passing through the Legislature of the Patents Act of 1883. Dissatisfaction with the old law had frequently been expressed by inventors, and several previous attempts to improve it had been made both by the Government and by private members of the House of Commons, but the Bills for various reasons failed to receive legislative sanction.

By the new Act the provisions of many earlier statutes have been consolidated and amended; several features hitherto unknown in our system have been introduced; the procedure has been simplified; the fees payable to Government on applications for Patents have been reduced, and greater facilities for the payment of the subsequent fees have been afforded. By these changes it was hoped that the inventive talent of the nation would be stimulated into more vigorous action, and if the number of applications (13,012) during the first nine months of 1884 compared with the number (4,656) during the first nine months of the preceding year affords an adequate means of judging, that hope will not be disappointed.

The new Act abolishes the Commissioners of Patents, who are replaced by the Board of Trade as the governing body of the Patent Office. The Comptroller is the chief officer of the Board, and upon him devolves the charge of managing the business and superintending the work of the office. The Board was authorised to make rules, having the same effect as if forming part of the Act, for regulating the conduct of Patent business; and it has accordingly promulgated a long series of rules for that purpose accompanied by forms.

The chief alterations in the procedure are:—1. Non-inventors may join with inventors in applying for a Patent. 2. The applications and specifications are referred to official examiners, who report whether the documents are in proper form; if they are not in proper form, the Comptroller requires them to be amended before acceptance, subject to appeal to a Law Officer. 3. Oppositions to the grant of Patents are decided by the Comptroller, subject to appeal to a Law Officer. 4. The steps necessary to be taken for obtaining a Patent are fewer. 5. Applications and other documents may be sent to the Patent Office through the post. 6. Patents are sealed by the Comptroller with the seal of the Patent Office. 7. The Government fees are reduced from 25*l.* for a three years' Patent to 4*l.* for a four years' Patent, and the payment of the remaining fees of 50*l.* and 100*l.* is postponed to the end of the fourth and the seventh years respectively, or they are payable in small annual sums. 8. Applications for leave to amend specifications are decided in the first instance by the Comptroller and on appeal by a Law Officer. 9. A new mode of obtaining

the repeal of invalid Patents is substituted for the old proceeding of *scire facias*.

Whilst the procedure has undergone great alterations, the substantive law has been but little touched. The old decisions of the Courts regarding the subject matter of patentable inventions; the incidents of utility and novelty which every patentable invention must possess; the contents of specifications and the infringement of Patents, still remain applicable to Patents issued under the new Act. The duration of a Patent is the same as before the Act, and its extent is practically the same, being only smaller by the omission of the Channel Islands. The principal changes to be noticed are:—1. The Board of Trade is empowered to order patentees to grant licenses if they make default in granting them on reasonable terms. 2. The right of the Crown to use patented inventions without making compensation has been abolished. 3. A Patent may be assigned for any place in or part of the United Kingdom. 4. A British Patent will no longer come to an end at the expiration of any earlier foreign Patent for the same invention.

In preparing the Fifth Edition of this work for the press, the provisions relating to Patents in the new Act have been incorporated with the text, and the recent decisions of the Courts have been noticed in their proper places. Considerable additions have been introduced, and the matter of several chapters has undergone rearrangement with the view of establishing a closer logical connection between the various parts. The whole has been subjected to careful revision, and no pains have been spared to render the treatise one that

patentees and inventors may consult with confidence as a trustworthy exposition of that branch of law with which their interests are most closely concerned. It may be added, that although the treatise was originally written especially for their use, the authors venture to think that in its enlarged form it may deserve the notice of the legal profession, since the large experience of one of them in obtaining Patents, and in the conduct of litigation arising out of Patents for upwards of thirty years has been turned to account in the production of the volume.

Besides summaries of the Patent Laws of Foreign States, all of which have been revised by professional correspondents, there will be found in the Appendix some account of those of our own Colonies, and reprints of the only two Acts of Parliament which have now any direct bearing on the subject of this work; as well as of the rules and forms issued by the Board of Trade under the authority of the new Act, of the rules framed by the Law Officers in regard to proceedings before them, and of the rules of the Privy Council with respect to applications for the extensions of Patents.

The Appendix also contains a reprint of the International Convention and Protocol relating to arrangements for the mutual protection of industrial property including patents. To this convention Great Britain has recently given her adhesion, and a chapter has therefore been devoted to the subject in the body of the treatise.

The copious Index will be found of material assistance by those readers who are in search of any particular topic.

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October 1884.

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B. & C.	Barnewall & Cresswell's Reports
Bea.	Beavan's Reports
B. & S., or Best & Sm.	Best & Smith's Reports
Bing. N. C.	Bingham's New Cases
Bos. & Pul.	Bosanquet & Pullar's Reports
C. B.	Common Bench Reports
C. B. N. S.	Common Bench Reports, New Series
C. & K.	Carrington & Kirwan's Reports
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Ell. Bl. & Ell.	Ellis, Blackburn & Ellis' Reports
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THE LAW

OF

PATENTS FOR INVENTIONS.

CHAPTER I.

PRELIMINARY.

THAT the Crown has the power, in certain cases, of granting to inventors the privilege of a monopoly in working their inventions for a certain number of years, is probably known to every reader before he opens this volume. During that period the entire community is precluded from making use of the invention, except by the permission of the inventor or the person who has duly succeeded to his rights; the law declaring that the privileged person shall derive the exclusive benefit, whatever that may be, of the invention for the specified time.

This privilege was formerly secured to the inventor by letters patent passed under the Great Seal. It is now secured to him by a patent obtained at the Patent Office; and the person to whom the privilege is granted is termed in common parlance the patentee.

For the purposes of the present treatise, there is no need that we should enter upon any historical disquisition as to the common-law right of the Crown in matters

of patent privileges. It will be sufficient to state that the right of the Crown to grant privileges by letters patent to subjects obtaining its favour, was exercised in very early times, and it was only disputed when exclusive rights to sell various commodities, such as salt, iron, and coal, had been granted to certain persons, to the great grievance of their fellow-subjects, and to the oppression of trade. The Statute of Monopolies, passed in the twenty-first year of James I., was levelled at the abuses which an undue exercise of prerogative had produced, and being, says Sir Edward Coke, forcibly and vehemently penned for their suppression, cut off all claim on the part of the Crown to the right of granting monopolies and exclusive privileges, whereby the subjects of the realm could be aggrieved and inconvenienced.[1]

That statute (*see the Appendix*) declared that all

[1] 'The King had undoubtedly, by the ancient laws of the realm, large powers for the regulation of trade: but the ablest judges would have found it difficult to say what was the precise extent of those powers. . . . In addition to his undoubted right to grant special commercial privileges to particular places, he long claimed a right to grant special commercial privileges to particular societies and to particular individuals; and our ancestors, as usual, did not think it worth their while to dispute this claim till it produced serious inconvenience. At length, in the reign of Queen Elizabeth, the power of creating monopolies began to be grossly abused; and as soon as it began to be grossly abused, it began to be questioned. The Queen wisely declined a conflict with a House of Commons backed by the whole nation. She frankly acknowledged that there was reason for complaint: she cancelled the patents which had excited the public clamours; and her people, delighted by this concession and by the gracious manner in which it had been made, did not require from her an express renunciation of the disputed prerogative. The discontents which her wisdom had appeased were revived by the dishonest and pusillanimous policy of her successor, called King-craft. He readily granted oppressive patents of monopoly. When he needed the help of his Parliament, he as readily annulled them; and as soon as the Parliament had ceased to sit, his Great Seal was put to instruments more odious than those he had recently cancelled. At length that excellent House of Commons which met in 1623, determined to apply a strong remedy to the evil. The King was forced to give his assent to a law which declared monopolies established by royal authority to be null and void.' (Macaulay's 'History of England,' iv. 127.)

monopolies, grants, and letters patent, for the sole buying, selling, making, working, or using of anything within the realm, were contrary to the laws, and void. But it excepted from the operation of this enactment all letters patent and grants of privilege of the *sole working or making of any manner of new manufactures to the true and first inventor of such manufacture, which others at the time of making such letters patent and grants should not use*, so they be not contrary to law, nor mischievous to the state, by raising prices of commodities at home, or hurt of trade, or generally inconvenient. It was afterwards declared that these excepted grants of privilege should have the same validity that they had previous to the passing of the statute, but no other. 'It is to be observed' (said *Lord Justice James* in the case of *Von Heyden* v. *Neustadt*, 50. L. J. N. S. 126), 'that the statute of James gives no right to the inventor. The statute is a statute for the abolishing and forbidding monopolies, and the sixth section under which the Crown acts in these matters is a mere proviso excepting from the operation of that Act certain patents or grants of privileges, which are to be "of such force as they should be if that Act had never been made and of none other." And it is from the ancient power and prerogative of the Crown so saved and preserved that every patentee derives his monopoly. What the Crown could lawfully do, and has lawfully done, after that statute, is shown by the uniform tenor of the letters patent which have been since issued, issued by the advice and authority of every law officer and every holder of the Great Seal for upwards of two centuries and a half. The power of the Crown to grant letters patent of such tenor has never been brought in question.'

When the validity of a monopoly comes into question,

the first point to consider is, whether it is rendered void by the statute; and secondly, if it should not be thereby avoided, whether it is a privilege permitted by the common law.

In this treatise, however, we restrict ourselves to a consideration of Patents for inventions. It is not every kind of discovery that can be protected by a patent. The statute of James I. and the decisions of our courts of law, require a patentable invention to be referable to some *manner of manufacture*, in addition to the possession of the qualities of *utility* and *novelty*.

Nor is it every one who may succeed in obtaining a grant of a patent for an invention that is able to sustain it in a court of law. Patents are only valid when they have been obtained by the true and first inventor, the language of the statute of James.

Again, a patent privilege cannot be granted *in perpetuum*; it must not endure for more than a limited number of years.

We shall take these things in order, and shall proceed to inquire in the following chapters—

1. What is the subject-matter or nature of a patentable invention, and what are the incidents that must by law accompany it.

2. To whom patent privileges may legally be granted.

3. What is the possible duration of such privileges, and the territory over which they may extend.

These matters being disposed of, there will still remain for consideration the very important topic of a *Specification* — the document which the law requires every patentee to draw up and make public before he obtains his patent. Chapters on some collateral subjects, such as *Oppositions* to the grant of a patent, *Amendments*, *Assignments* and *Licences*,

the *Prolongation* and *Revocation* of Patents, and the *Infringement* of patent rights, will then close this treatise.

In the Appendix will be found reprints of the statute of James and the Patent Act of 1883, with the Rules and Forms, and an outline of the Patent Laws of Foreign Countries and British Colonies.

CHAPTER II.

THE SUBJECT-MATTER OR NATURE OF A PATENTABLE INVENTION.—A BARE PRINCIPLE NOT PATENTABLE.—PROCESSES.—CLASSES OF INVENTIONS.—AMOUNT OF INVENTION.—SECOND PATENTS.

In proceeding to consider the subject-matter or nature of the inventions which may be legally protected by patents, it is proper to premise that no general definition can be given which shall exactly mark out what can and what cannot be included in a valid patent. Where the invention is not one of a well-known class, it will be much better for the inventor to consult some one conversant with such matters,—some one whose practical experience comes in aid of general principles, and who is bound by his profession and standing in society to the utmost secresy,—than to rely altogether upon what is stated in books, or upon a narrow range of precedent. It is the more important that the inventor's attention should be drawn to this point previous to his incurring expense, since a patent is taken out entirely at the risk of the inventor, the Crown in no degree guaranteeing the validity of its grant, which, if contested, must be judged by the abstract rules of law applicable to the case.

As we have already remarked, it is not every kind of discovery which can be protected by a patent. No invention is patentable which does not fall within the language of the Act of King James and is not referable to some manner of manufacture. It is true, as we shall

see further on, that these words have received a very wide interpretation; still they have never been held to include such inventions and discoveries as that of an abstract principle without reference to any of its practical applications; or that of a game of skill or chance irrespective of the appliances for playing it; or that of a method of calculation unconnected with apparatus for working it; or that of a newly discovered vegetable suitable for food; or that of a newly discovered natural substance applicable to a useful purpose, such as guano or mineral phosphate of lime. Patents which relate to inventions such as these can only be maintained when they are taken out for the manufacture of the apparatus required for the given purpose, or for methods of preparing the natural substance for some useful end.

Before giving examples of the chief classes into which those inventions which have received the sanction of judicial decision are divisible, it may be well first to clear the ground a little by making some remarks on the cases relating to Principles and Processes.

It has been repeatedly laid down by the Courts that

BARE PRINCIPLES ARE NOT PATENTABLE.

A principle may be of the utmost value in the eyes of philosophers; its discovery may lead to highly important consequences, and form the germ of a striking advance in civilisation; yet unless its discoverer can show at least one application of it to a useful purpose, —unless he can point out the means of gaining therefrom some immediate material advantage, he is not permitted to exclude his fellow-subjects from turning it to any account they like. 'I rather think it would be difficult' (said Lord Kenyon, in *Hornblower* v. *Boulton*, 8 T. R. 95; Dav. Pat. Ca. 221) 'to form a specification of a philosophical principle; it would be something like an idea without a substratum.'

Neither are principles in a more restricted sense patentable, unless they are embodied in a concrete form and their application to some purpose of utility indicated. 'You cannot' (said *Alderson, B.*, in *Jupe* v. *Pratt*, 1 W. P. C. 145) 'take out a patent for a principle. You may take out a patent for a principle coupled with the mode of carrying the principle into effect, provided you have not only discovered the principle, but invented some mode of carrying it into effect. But then you must start with having invented some mode of carrying the principle into effect.' Again, *Sir W. P. Wood, V. C.*, said in *Dangerfield* v. *Jones* (13 L. T. N. S. 142), 'If, having a particular purpose in view, you take the general principles of mechanics and apply one or other of them to a manufacture to which it has never been before applied, that is a sufficient ground for taking out a patent, provided that the Court sees that which has been invented is new, desirable, and for the public benefit.'

In the much-debated case of *Neilson* v. *Harford* (1 W. P. C. 295) a great deal was said as to the point now before us. Neilson took out his patent in 1828 for the improved application of air to produce heat in furnaces, and in his specification declared that his invention consisted in passing a blast of air from the blowing-apparatus into an air-vessel kept heated to a red-heat, or nearly so, and from that vessel, by means of a pipe, into the furnace; that the size of the vessel must depend on the blast, and on the heat necessary to be produced, but that the form of the vessel was immaterial to the effect, and might be adapted to the local circumstances or situation. The defendants, who were alleged to have infringed this patent, contended that it was void, as being for a principle. The Court of Exchequer, after full consideration, thought that the plaintiff did not merely claim a principle, but a

machine embodying a principle. The case must be considered as if the principle being well known, the plaintiff had first invented a mode of applying it by a mechanical apparatus to furnaces; and the invention then consisted in this—the interposition of a receptacle for heated air between the blowing-apparatus and the furnace. In the course of the argument, on motions subsequent to the trial, various observations were made by the learned judges on the bench, to which we shall draw the reader's attention. *Alderson, B.*, said, 'The blowing-apparatus was perfectly well known; the heating of air was perfectly well known; the tuyere was perfectly well known as applicable to blast furnaces; then what he really discovered is, that it would be better to apply air heated up to red-heat, or nearly, instead of cold air. That is the principle—that is the real discovery; but in order to take out a patent, you must have an embodiment of the principle; and his embodiment of the principle is the heating of air in a separate vessel intermediately between the blowing-apparatus and the point where it enters the furnace.' Then he says, 'I do not mean to claim any shape in which it is done; it may be done in a vessel of any shape, provided only you have such a vessel of such a shape, and fire so applied as that, in the intermediate space between the blowing-apparatus and the furnace, the air arrives at the red-heat.' And again, in reply to the argument of the plaintiff's counsel that he claimed every vessel and every shape of closed vessel in which air could be heated between the blowing-apparatus and the furnace: 'Then I think that is a principle, if you claim every shape. If you claim a specific shape, and go to the jury and say that which the other people have adopted is a colourable imitation, then I can understand it. If you claim every shape, you claim a principle. There is no difference between a principle

to be carried into effect in any way you will, and claiming the principle itself. You must detail some specific mode of doing it.'

The words of *Lord Justice Clerk Hope*, in the case of the *Househill Company* v. *Neilson* (1 W. P. C. 683), may also be cited in reference to the same point. 'A patent cannot be taken out solely for an abstract philosophical principle—for instance, for any law of nature or any property of matter, apart from any mode of turning it to account in the practical operations of manufacture, or the business, and arts, and utilities of life. The mere discovery of such a principle is not an invention, in the patent-law sense of the term. Stating such a principle in a patent may be a promulgation of the principle, but it is no application of the principle to any practical purpose. And without that application of the principle to a practical object and end, and without the application of it to human industry or to the purposes of human enjoyment, a person cannot in the abstract appropriate a principle to himself. But a patent will be good, though the subject of the patent consists in the discovery of a great general and most comprehensive principle in science or law of nature, if that principle is by the specification applied to any special purpose, so as thereby to effectuate a practical result and benefit not previously attained. . . . It is no longer an abstract principle. It comes to be a principle turned to account to a practical object, and applied to a special result. It becomes then not an abstract principle, which means a principle considered apart from any special purpose or practical observation, but the discovery and statement of a principle for a special purpose, that is, a practical invention, a mode of carrying a principle into effect. . . . The instant that the principle, although discovered for the first time, is stated in actual application to, and as the agent of, producing

a certain specified effect, it is no longer an abstract principle; it is then clothed with the language of practical application, and receives the impress of tangible direction to the actual business of life.' 'Undoubtedly (said *Eyre, C. J.*, in *Boulton* v. *Bull*, 2 H. Bl. 463, 1 Carp. 149) there can be no patent for a mere principle; but for a principle so far embodied and connected with corporeal substances as to be in a condition to act and to produce effects in any art, trade, mystery, or manual occupation, I think there may be a patent. . . . It is not (referring to the case before him) that the patentee has conceived an *abstract* notion that the consumption of steam in fire-engines may be lessened, but he has discovered a practical manner of doing it, and for that practical manner of doing it he has taken his patent. Surely this is a very different thing from taking a patent for a principle; it is not for a principle, but for a process. Again, the substance of the invention is a discovery that the condensing the steam out of the cylinder, and protecting the cylinder from the external air, and keeping it hot to the degree of steam-heat, will lessen the consumption of steam. This is no abstract principle; it is in its very statement clothed with practical application.'

Again, in the case of *Neilson* v. *Harford* (1 W. P. C. 342) *Alderson, B.*, said, 'I take it that the distinction between a patent for a principle and a patent which can be supported is, that you must have an embodiment of the principle in some practical mode, described in the specification, of carrying the principle into actual effect; and then you take out your patent, not for the principle, but for the mode of carrying the principle into effect. In Watt's patent, which comes the nearest to the present of any you can suggest, the real invention of Watt was, that he discovered that by condensing steam in a separate vessel, a great saving of

fuel would be effected by keeping the steam cylinder as hot as possible, and applying the cooling process to the separate vessel, and keeping it as cool as possible; whereas before, the steam was condensed in the same vessel; but then Mr. Watt carried that practically into effect by describing a mode which would effect the object. The difficulty which presses on my mind here is, that this party has taken out a patent, in substance like Watt's, for a principle, that is, the application of hot air to furnaces; but he has not practically described any mode of carrying it into effect. If he had, perhaps he might have covered all other modes as being a variation.'

Minter's patent was for an improvement in the construction of chairs, which consisted in the application of a self-adjusting leverage to the back and seat of a chair, whereby the weight on the seat acted as a counterbalance to the weight against the back. The patentee having obtained a verdict at the trial of an action for the infringement of the patent, it was contended, on a motion for a nonsuit, that the patentee had claimed a *principle*, and not any particular means of carrying the principle into effect. Now, to a principle *per se* he was not entitled; and as to the particular means adopted, the defendant had not borrowed it. The plaintiff, it was further argued, had attempted to appropriate by his specification one of the first principles in mechanics, viz. the lever. 'But,' said *Lyndhurst*, *C. B.*, 'it is not a leverage only, but it is a self-adjusting leverage; and it is not a self-adjusting leverage only, but it is a self-adjusting leverage producing a particular effect, by means of which the weight on the seat counterbalances the pressure on the back of a chair.' And *Parke*, *B.*, said, 'For the application of a self-adjusting leverage to a chair, cannot he patent that? He claims the combination of the two, no matter in what shape or way

you combine them; but if you combine the self-adjusting leverage, which he thus applies to the subject of a chair, that is an infringement of the patent.' *Lord Lyndhurst* went on to say that the application of a self-adjusting leverage producing the effect constituted the machine, and the patentee claimed that machine, and the right to make it, by the application of a self-adjusting leverage producing a particular effect (*Minter* v. *Wells*, 1 W. P. C. 134).

In the case of the *Electric Telegraph Company* v. *Brett* (10 C. B. R. 838) it was argued that the giving of duplicate signals at intermediate stations was not the proper subject of a patent,—being an idea or principle only, and not a new manufacture. But it was held by the Court, that as the patentees had not only communicated the idea or principle, but showed how it might be carried into effect, viz. by appropriate apparatus at each station, the patent was valid.

See also the remarks upon this subject of *Jessel, M. R.*, in the case of *Otto* v. *Linford* (46 L. T. N. S. 35).

PROCESSES.

It will have been observed, that what the statute of King James excepts from the operation of the invalidating first clause is the privilege of the *sole working or making of any manner of new manufactures*. Now it seems to have been at one time doubted whether a mere method or process was embraced by these words of the statute. *Perhaps*, said *Lord Tenterden, C. J.*, in the case of *Rex* v. *Wheeler* (2 B. & A. 350), the statute 'may extend to a new process to be carried on by known implements, or elements acting upon known substances, and ultimately producing some other known substance, but producing it in a cheaper or more expeditious manner, or of a better and more useful kind.'

The current of decision since Lord Tenterden's time has converted what he put in a doubtful way into a certainty; for the books are full of cases which prove beyond a doubt that a process is patentable. The patent contested in *Gibson* v. *Brand* (1 W. P. C. 631) was for a new or improved process or manufacture of silk. *Tindal, C. J.*, said that there was strong reason to suppose that a patent for a process, in the strict or proper sense of the term, might be good in law. Such certainly was the opinion of *Chief Justice Eyre* in *Boulton* v. *Bull* (which opinion we shall quote at length immediately), and such also appears to have been the opinion (carefully guarding against any abuse of the doctrine) of *Lord Tenterden* in *Rex* v. *Wheeler*.

It has been said that the doubt as to whether a process is patentable has been needlessly raised, and that it is a misuse of terms to speak of a patentable process at all. The subject-matter of the patent, it is urged, is in reality a *manufacture according to a new process*, and this is therefore a new manufacture. For example, in *Crane* v. *Price* (1 W. P. C. 377), the subject of the patent was, according to this view, the manufacture of iron by means of a new process, viz. the combination of a hot-air blast and anthracite in the furnace. In *Gibson* v. *Brand* it was the manufacture of silk by a new process.

We are told by *Pollock, C. B.* (*Stevens* v. *Keating* 2 W. P. C. 182), that 'the real invention may be, not so much the thing when produced, as the mode in which it is produced; and its novelty may consist, not so much in its existence as a new substance, as in its being an old substance, but produced by a different process. In one sense, an old substance produced by a new process is a new manufacture; of that there cannot be a doubt; and therefore, although the language of the Act has been said to apply only to manufactures

and not to processes, when you come to examine, either literally, or even strictly, it appears to me the expression "manufacture" is free from objection, because, though an old thing, if made in a new way, the very making of it in a new way makes it a new manufacture. Therefore, although I think this is a patent for the process rather than the product, I think it may be a patent for the product.'

Allowing this explanation its full force, it will not extend to many cases wherein it has been decided that bare processes are patentable, or to cases where patents for mere applications have been supported. For example, in *Forsyth* v. *Riviere* (1 Carp. Rep. 401), the application of a known detonating powder to the discharge of known kinds of fire-arms was held to be a patentable invention. But how could this be a manufacture? Again, in the case of *Hartley's Patent* (1 W. P. C. 54), it was held that the application of metal plates, made in the ordinary way, to ships and buildings, with the view of protecting them against fire, by preventing the access of air, was a patentable invention. Again, in the case of the *Electric Telegraph Company* v. *Brett* (10 C. B. R. 838), a method of giving duplicate signals at intermediate stations was held to be properly the subject of a patent. In none of these cases was any new substance produced, nor any new machinery employed. 'Most certainly the exposition of the statute, as far as usage will expound it, has gone very much beyond the letter' (*Eyre, C. J.*, in *Boulton* v. *Bull*, 1 Carp. R. 146); and *Lord Chief Justice Tindal's* remarks in *Cornish* v. *Keene* (1 W. P. C. 508) show the latitude of interpretation which is given to the word 'manufactures' in the Act of Parliament. 'It has a very wide and extended meaning. You may call it almost *invention*.' Again, *Coleridge, J.*, said, in *Bush* v. *Fox* (Macr. P. C. 176), manufac-

ture includes both process and result. And in *Ralston* v. *Smith* (11 H. L. C. 223), *Lord Westbury* said, 'By the large interpretation given to the word "manufacture," it not only comprehends productions, but it also comprehends the means of producing them. Therefore, in addition to the thing produced it will comprehend a new machine, or a new combination of machinery; it will comprehend a new process or an improvement of an old process.'

In *Newall* v. *Elliott* (13 W. R. 11) the patent was for 'improvements in apparatus employed in laying down submarine telegraph wires;' and the specification, after describing the apparatus, concluded with the following claim:—'First, coiling the wire or cable round a cone; secondly, the supports placed cylindrically outside the coil round the cone; thirdly, the use of the rings in combination with the cone as described.' It was objected that the invention thus claimed was merely a mode of coiling and paying out cables, and was not a new manufacture, and could not therefore be the subject-matter of a patent. The Court, however, over-ruled the objection, and held the patent valid.

Previous to the patent granted to Wallington, gelatine had been made by submitting large pieces of hide to the action of caustic alkali, and by employing blood to clarify the product. Wallington's process consisted in cutting the hides into thin slices, and the use of blood was unnecessary. This was held to be a patentable invention. (*Wallington* v. *Dale*, 7 Exch. Rep. 888.)

The observations of *Chief Justice Eyre*, on delivering judgment in the famous case of *Boulton* v. *Bull* (1 Carp. R. 146–149), are so important that we shall lay them, with little abridgment, before the reader. The patent concerned in this case was that of James Watt for improvements in steam engines, at that time

called fire-engines. 'It was admitted in the argument at the bar that the word "manufacture" in the statute was of extensive signification; that it applied not only to things made, but to the *practice of making*, to principles carried into practice in a new manner, to new results of principles carried into practice.

'The effect produced by Hartley's invention for securing buildings from fire is no substance or composition of things; it is a mere negative quality—the absence of fire. This effect is produced by a new method of disposing iron plates in buildings. In the nature of things, the patent could not be for the effect produced. I think it could not be for the making the plates of iron, which, when disposed in a particular manner, produce the effect; for those are things in common use. But the invention consisting in the method of disposing those plates of iron, so as to produce their effect, and that effect being a useful and meritorious one, the patent seems to have been very properly granted to him for his method of securing buildings from fire. . . . In the list of patents with which I have been furnished, there are several for new methods of manufacturing articles in common use, where the sole merit and the whole effect produced are the saving of time and expense, and thereby lowering the price of the article, and introducing it into more general use. Now, I think these methods may be said to be new manufactures, in one of the common acceptations of the word; as we speak of the manufacture of glass, or of any other thing of that kind. The advantages to the public from improvements of this kind are, beyond all calculation, important to a commercial country, and the ingenuity of artists who turn their thoughts towards such improvements is in itself deserving of encouragement; and in my apprehension it is strictly agreeable to the spirit and meaning of the

statute 21 James I., that it should be encouraged. . . . Probably three-fourths of all patents granted since the statute passed are for methods of operating and manufacturing, producing no new substances, and employing no new machinery. . . . If we wanted an illustration of the possible merit of a new method of operating with old machinery, we might look at the case now before the Court. If we consider into what general use fire-engines are come—that our mines cannot be worked without them—that they are essentially necessary to the carrying on many of our principal manufactures—that these engines are worked at an enormous expense in coals, which, in some parts of the kingdom, can with difficulty be procured at all in large quantities—it is most manifest that any method found out for lessening the consumption of steam in these engines, which, by necessary consequence, lessens the consumption of coals expended in working them, will be of great benefit to the public as well as to the individual who thinks fit to adopt it. And shall it now be said, after we have been in the habit of seeing patents granted in the immense number in which they have been granted, for methods of using old machinery to produce substances that were old, but in a more beneficial manner, and also for producing negative qualities by which benefits result to the public, by a narrow construction of the word "manufacture" in this statute, that there can be no patent for methods producing this new and salutary effect, connected, and intimately connected, with the trade and manufactures of the country?'

CLASSIFICATION OF PATENTABLE INVENTIONS.

The inventions for which valid patents have been granted may be roughly divided into the following classes:—

1. *New contrivances applied to new objects or purposes.*

2. *New contrivances applied to old objects or purposes.*

3. *New combinations of old parts, the subject-matter consisting either of material objects or of mechanical processes.*

4. *New methods of applying an old thing.*

5. *Chemical processes, usually but not always in combination with mechanical contrivances.*

The reader may like to have some illustrations of these classes of inventions, and we shall proceed to offer the following:—

1. *New contrivances applied to new objects or purposes.* Several modern inventions of great commercial or social importance would fall under this head. Amongst them are conspicuous—Apparatus to be worked by electricity for transmitting messages from place to place on land; wire cables for transmitting messages by the aid of electricity across the ocean; telephonic apparatus for transmitting words from the mouth of a speaker to the ear of a listener at a distance.

2. *A new contrivance employed to effect a well-known object*—to make, for instance, an article previously made in a different way—is also patentable, provided that the new contrivance is attended with some degree of utility; for example, that it accomplishes the result more cheaply than the old contrivance. 'There may be a valid patent' (said *Lord Eldon* in *Hill* v. *Thompson*, 1 W. P. C. 237) 'for a new combination of materials previously in use for the same purpose, or for a new method of applying such materials.'

Again, where an invention effects a known purpose with new materials, it will be held a patentable process. Thus, Binney obtained a patent for the manufacture of packing for the joints of steam-engines. Feltmann afterwards obtained a patent for the same object, but

he employed different materials for the packing stuff. The later patent was held to be good for a new process. (*Binney* v. *Feltmann*, W. N. 1875, p. 88.)

3. *A combination of known parts*, producing a new result, or producing an old result in a more economical manner or more perfect form, whereby articles cheaper or better than had ever before been produced are rendered accessible to the public, will be held a meritorious and patentable invention. This is, perhaps, the largest class of patented inventions. It was held in *Crane* v. *Price* (1 W. P. C. 408) that the combination of the hot-air blast with stone coal in the smelting of iron (the hot-air blast and stone coal having been separately in use before, but the combination being previously unknown) was an invention intended by the statute, and such as might well become the subject of a patent. It was said by *Tindal, C. J.*, that there were numerous instances of patents where the invention consisted in no more than in the use of things already known, and acting with them in a manner already known, and producing effects already known, but producing those effects so as to be more economically or beneficially enjoyed by the public.

That the novel combination of old parts having a useful result may form the subject of a valid patent has been again and again decided. (*Lister* v. *Leather*, 8 E. and B. 1004; *Newall* v. *Elliott*, 10 Jur. N. S. 954; *S. C.* 13 W. R. 11; *Murray* v. *Clayton*, L. R. 7 C. 570; *Cannington* v. *Nuttall*, L. R. 5 H. L. 205; *Hayward* v. *Hamilton*, Court of App. 1881.) 'If there be' (said *Lord Westbury* in *Spencer* v. *Jack*, 3 De G. J. & S. 346) 'a combination of several things previously well known, which combination is attended with such re-results of utility and advantage to the public that the combination itself is rightly denominated a substantial

improvement, it is impossible to deny that that is the subject of a patent.' See further as to combinations in the chapter on the Complete Specification.

A new combination of old parts may even consist of a mode of manufacturing that differs from an old process in nothing, except in the omission of a step, provided that some degree of invention has been manifested in arriving at the new combination or process. Thus in the case of *Russell* v. *Cowley* (1 W. P. C. 459) a patent had been obtained for an invention for manufacturing iron tubes, by welding them without the use of a mandrel, or internal support; and its validity being contested, it was held good. The process, from first to last, consisted in turning up the edges of a flattened metal plate until they nearly met; in heating the plate, so prepared; and in drawing it when at a welding heat through dies having a conical hole. In passing from the broader to the narrower end of the hole, the edges were compressed against each other, and were welded together; the tube was thus formed without having recourse to the old process, which required a mandrel, whereon the overlapping edges of the metal plate were welded by means of hammers. It being contended that welding by pressure was not a new invention, *Lord Lyndhurst* read the specification as claiming only the manufacture of tubes without a mandrel. By the new process, tubes could be made of greater length, of greater uniformity, and considerably cheaper, than before.

It was held in *Booth* v. *Kennard* (1 H. & N. 527), that to obtain gas by the direct distillation of oleaginous seeds was a patentable invention, although gas had been previously obtained by the distillation of oil expressed from oleaginous seeds.

4. *A new mode of applying a known thing may be the subject of a patent, provided that some ingenuity, some novelty, is exhibited in the mode of making that*

application, and that the application is attended by some useful result. In Watt's patent for a new method of lessening the consumption of steam and fuel in steam-engines, the enclosing of the cylinder in a case of wood, or any other material that transmits heat slowly, was claimed, and allowed to be a patentable invention. (*Boulton* v. *Bull*, 2 H. Bl. 463, 1 Carp. 117.) In Forsyth's patent for a method of discharging fire-arms, the patentee claimed the use and application of certain known fulminating compounds for this purpose. It was contended that, since the properties of detonating powder were well known for other purposes, the using of such materials to discharge fire-arms was not a new manufacture for which a patent could be supported. But *Abbott, C. J.*, stated that if the invention (*i.e.* this particular application of detonating powder) were new, it was such a one as might be secured by patent. The jury having found the invention to be a new one, the patentee had a verdict. (*Forsyth* v. *Riviere*, 1 Carp. 404.)

Charcoal had been used in refining sugar previously to Derosne's patent; but the old method was to mix charcoal powder with the syrup, and the new was to pass the syrup through beds of charcoal constructed in a particular manner. By the old process a considerable quantity of charcoal was taken up by the syrup, and this was an injury to the sugar. In Derosne's process this objection did not arise; and, moreover, it was applicable not only to the refinement of coarse sugar, but to the original manufacture of sugar out of cane-juice. In an action brought for infringing the patent, the originality of the invention was held not to be impeached by showing that there had been an earlier use of charcoal in the refinement of sugar. No evidence was given that any other person, before the date of the plaintiff's patent, ever applied in use the

particular mode of filtering syrup which the patent was intended to introduce: and in the absence of such evidence, *Lord Abinger* directed the jury to find for the plaintiff. (*Derosne* v. *Fairie*, 1 W. P. C. 154.)

In the case of *Cornish* v. *Keene* (1 W. P. C. 517) a patent for improvements in the manufacture of elastic fabrics was contested. The patentee's mode of effecting his object was by introducing into the fabric threads of india-rubber, coated with filamentous material and applied as warp or weft, or as both, according to the direction of the elasticity required—the india-rubber threads having been stretched to their utmost tension and rendered non-elastic before being introduced into the fabric, and then being rendered elastic by the application of heat. It was contended that this was not a new manufacture; that it was neither a new manufacture, nor an improvement of an old manufacture, but was merely the application of a known material, in a known manner, to a purpose known before. 'That it is a manufacture' (said *Tindal, C. J.*, delivering the judgment of the Court) 'can admit of no doubt; it is a vendible article, produced by the hand and art of man. Whether it is new or not, or whether it is an improvement of an old manufacture, was one of the questions for the jury, upon the evidence before them; but that it came within the description of a manufacture, and so far is an invention which may be protected by a patent, we feel no doubt whatever. The materials, indeed, are old, and have been used before; but the combination is alleged to be, and if the jury are right in their finding, is new; and the result or production is equally so. The use of elastic threads or strands of india-rubber, previously covered by filaments wound round them, was known before; the use of yarns of cotton, or other non-elastic material, was also known before; but the placing them alternately side by side

together as a warp, and combining them by means of a weft when in extreme tension, and deprived of their elasticity, appears to be new; and the result, viz. a cloth in which the non-elastic threads form a limit up to which the elastic threads may be stretched, but beyond which they cannot, and therefore cannot easily be broken, appears a production altogether new. It is a manufacture at once ingenious and simple.'

In the case of *Kay* v. *Marshall, Lord Cottenham* said, in the House of Lords, 'that if Kay had discovered any means of using the machine (*i.e.* the ordinary spinning machine) which the world had not known before, the benefit of that he had a right to secure to himself by means of a patent; but if this mode of using the spinning machine was known before, then he could not deprive them of having the benefit of that which they enjoyed before.' (2 W. P. C. 82.)

A patent was granted for an improved mode of, and apparatus for, bending wood for the handles of walking-sticks, &c., and the specification described the apparatus as being a vice for holding a stick, previously softened in moist sand, placed close to a hollow mandrel, on which the bending was effected by sending a jet of lighted gas into it, and then securing the stick on the mandrel by a strip of steel. The heat stiffened the fibres of the wood, and the curvature was rendered permanent. In a suit to restrain the defendants from infringing the patent, its validity was called in question, on the ground that the invention was not new; but *Sir W. P. Wood, V. C.*, granted the injunction, saying, 'When it is stated that because wood is bent by coach-makers and others in a variety of ways by the application of heat, you cannot have a patent for the application of heat to the bending of walking-sticks, that is the same sort of reasoning that was pressed on the Court with reference to an invention for an improve-

ment on navigation. It was said that the operation of a propelling power by presenting a screw propeller to the action of water was nothing new—that it was like the action of a windmill with reference to the wind. That reasoning, however, did not succeed.' *Dangerfield* v. *Jones* (13 L. T. N. S. 142.)

It must be carefully kept in mind that, unless there is some display of ingenuity, a patent for the application of an old contrivance to a new object will not be valid. But as to this part of the subject the reader is referred to the next section of this chapter, and to the section on patents for applications in Chapter III.

5. *Chemical processes, usually but not always in combination with mechanical contrivances*, whereby something useful is produced or effected. Under this head the following examples may be given: the distillation of bituminous minerals for the production of illuminating and lubricating oils (*Young* v. *Fernie*, 4 Giff. 597); the purification of coal gas by means of oxides, chlorides, &c. (*Hills* v. *London Gas Light Company*, 5 H. & N. 312); the precipitation of the solid animal and vegetable matter contained in sewage water with a view to its employment as manure (*Higgs* v. *Goodwin*, E. B. & E. 529); the preparation of dyeing materials (*Steiner* v. *Heald*, 6 Exch. 607; *Simpson* v. *Holliday*, 5 N. R. 340, L. R. 1 H. L. 315); the mixture of two or more substances in certain definite proportions forming a compound substance useful for its preservative, sanitary, or other useful properties (*Bewley* v. *Hancock*, 6 De G. M. & G. 402; *Muntz* v. *Foster*, 2 W. P. C. 103; *Bailey* v. *Roberton*, L. R. 3 App. Ca. 1055).

AMOUNT OF INVENTION REQUIRED TO SUPPORT A PATENT.

In contesting the validity of a patent, it is often objected that there had been no exercise of ingenuity

on the part of the alleged inventor in arriving at his invention, and that mere accident or good luck is not entitled to a patent privilege. Where, however, the utility of the invention is great, and the novelty undoubted, these facts will come in aid of an apparent want of ingenuity on the part of the inventor.

It is impossible, however, to lay down any general rule as to the amount of ingenuity which is essential to support a patent. In nice cases there can be no certainty previous to a judicial decision on the point whether any given patent is or is not impeachable on the ground of want of ingenuity; which phrase cannot be regarded, perhaps, as different from want of novelty. All that can be done is to study the decisions already made, and to be guided by those cases which approach nearest to the one about which doubt may be felt. Some of the decisions, indeed, seem to conflict with others; and it will require a good deal of acute discrimination on the part of those who are called on to advise inventors, to distinguish the line which separates what is patentable from what is not patentable.

'In point of law' (said *C. J. Tindal*, in *Crane* v. *Price*, 1 W. P. C. 411), 'the labour of thought or experiment, and the expenditure of money, are not the essential grounds of consideration on which the question whether the invention is or is not the subject-matter of a patent ought to depend; for if the invention be new and useful to the public, it is not material whether it be the result of long experiment and profound search, or of some sudden and lucky thought, or mere accidental discovery.' In either of the two last cases, the practical realisation of a good idea will be considered a sufficiently meritorious consideration for the exclusive privilege granted to the inventor, although the actual amount of thought expended in making the invention was trifling. The case of water-tabbies, so often men-

tioned in courts of law, is a case in point. The invention (according to *Mr. Justice Buller* in *Boulton* v. *Bull*, 2 H. Bl. 463, 1 Carp. 117) first owed its rise to the accident of a man spitting on a floor-cloth, which changed its colour, whence he reasoned, had his patent, and made, it is said, a considerable fortune by it.

The making of iron gas-tubes without the use of a mandril, viz. by welding them without striking them on a solid surface, 'seems to be a very simple invention' (said *Lyndhurst, C. B.*, in *Russell* v. *Cowley*); 'but it has been productive of great advantages inasmuch as it has enabled the manufacturer to construct pipes of lengths much beyond what could be done previously to this discovery' (1 W. P. C. 467). Hence the utility of the invention was apparent from the important consequences that flowed from it, and the patent was supported.

Lace made from cotton had the defect of being covered with a kind of down, which injured its appearance and diminished its value. A similar defect was removed from muslin by passing it over rollers of heated iron, and from mitts and stockings by the action of flame, fed by oil or alcohol. It occurred to Mr. Hall that the flame of gas might be employed in the manufacture of cotton lace; and after some failures he succeeded in inventing a method for removing the unsightly fibres by the flame of gas. A patent obtained for this invention was held good. (*Hall* v. *Jarvis*, 1 W. P. C. 100.)

The case of *Lewis* v. *Davis* (1 W. P. C. 488) is often cited to show that a small degree of invention suffices to sustain a patent, provided it be attended with useful results. The object of the patent was the shearing of cloth from *list to list* by means of rotatory cutters. Now a rotatory cutter to shear from *end to end* was known, and cutting from list to list by *means of shears* was also known. 'However' (said *Tenter-*

den, C. J., to the jury, on the trial of an action for the infringement of the patent, in which the question of novelty was raised), 'if before the plaintiffs' patent the cutting from list to list, and the doing that by means of rotatory cutters, *were not combined*, I am of opinion that this is such an invention by the plaintiffs as will entitle them to maintain the present action.'

In the case of *Hinks* v. *Safety Lighting Company* (L. R. 4 Ch. D. 607), *Jessel, M. R.*, held that the substitution of a flat wick for a solid round wick in a lamp was a sufficient ground for a patent; because, notwithstanding the apparent smallness of the invention, it had the effect of largely increasing the illuminating power of the lamp; in other words, it was a very useful invention. In giving judgment in the plaintiff's favour the learned judge made the following remark:—'Where a slight alteration in a combination turns that which was practically useless before into that which is very useful and very important, judges have considered that though the invention was small, yet the result was so great as fairly to be the subject of a patent; and as far as a rough test goes, I know of no better.' See also *Frearson* v. *Loe* (L. R. 9 Ch. D. 48).

The specification under E. L. Hayward's patent for improvements in pavement lights, described a combination of three things, viz. a frame, a flange, and a piece of glass moulded below into a particular form of prism; the object being, when the apparatus was inserted in a floor or pavement, to throw light coming from above into a room or space beneath, in a lateral direction. Now these three things taken separately were old. However, the Court of Appeal held, confirming the decision of the divisional court, that although a glass prism of another form had been employed in the decks of ships for the purpose of admitting light in a manner resembling, to a certain

extent, the plan adopted by Hayward, this was a novel combination of old parts with a useful result; and farther, that the combination displayed a sufficient amount of invention to support the patent. The Lords Justices were of opinion that Hayward was an inventor, since he had found out something new, and had made a useful article that had not been made before. 'If it is not an invention' (said *L. J. Bramwell*), 'it is very strange that it has never been done before. . . . It is not the less an invention because it required but small inventive powers to enable the patentee to do it.' *Hayward* v. *Hamilton* (Court of App. 1881.).

The question whether that which is an improvement of an existing machine was the result of a sufficient amount of invention, often raises one of the most difficult points of patent law. 'There are many cases in which the moment you see the specification or improvement you can say without any evidence at all, "This is a most remarkable, elaborate, and difficult thing to do; it must have required great invention, and there can be no dispute about it," and no dispute is ever raised. On the other hand, there are some things so clear, so simple, and so obvious, that a person having any decent amount of mechanical knowledge says at once it is so easy that it requires no invention at all; it is a mere mechanical equivalent, or that sort of thing, that any ordinary workman can do without any difficulty. Then there are a great number of cases between, where the improvement is no doubt small, but it may require a considerable amount of invention to effect it.' (Per *Jessel, M. R.*, in *Saxby* v. *The Gloucester Waggon Company*, Court of App., June 23, 1882; and House of Lords, June 25, 1883.)

The preceding cases may be compared with a series, which we will now cite, where the inventions were adjudged insufficient to support patents.

Brunton took out a patent for (amongst other things) an alleged improvement in anchors. The two flukes were made in one, and had such a thickness of metal in the middle that they might there be pierced with a hole for the insertion of the shank. Previously the two flukes had been joined by welding them to the shank. It came out, on a trial in Court, that the real improvement was in the avoidance of welding, and that this was done by means perfectly well known in other cases. There was no proof that the anchors made by the new process were better than those previously made; and since the invention seemed to be nothing more than the adoption of a known operation practised in analogous cases, it was held not patentable. (*Brunton* v. *Hawkes*, 4 B. & Ald. 540.) 'Now' (said *Abbott, C. J.*, in his judgment), 'a patent for a machine, each part of which was in use before, but in which the combination of different parts is new and a new result is produced, is good, because there is novelty in the combination. But here the case is perfectly different: formerly three pieces were united together; the plaintiff (Brunton) only unites two; and if the union of these two had been effected in a mode unknown before, as applied in any degree to similar purposes, I should have thought it a good ground for a patent; but unfortunately the mode was well known and long practised. I think that a man cannot be entitled to a patent for uniting two things instead of three, where that union is effected in a mode well known and long practised for a similar purpose.' (*Brunton* v. *Hawkes*, 1 Carp. Rep. 410.)

In the case of *Kay* v. *Marshall* (2 W. P. C. 34–84), it appeared that Kay had procured a patent for new and improved machinery for preparing and spinning flax, and the invention was declared in the specification to consist of new machinery for macerating flax previous

to drawing and spinning it; and also for improved machinery for spinning the same after having been so prepared. If the patent had been confined to the new machinery for macerating, it was allowed that it would have been perfectly good; but, as to the second part of the invention, it appeared that the improved machinery was nothing more than the placing of certain portions of a machine well known and in common use within two inches and a half of each other, instead of at a greater distance. It was shown that the distances between the parts in question had not been fixed in previous machines, but had been varied according to circumstances; and, further, that the reach used in *cotton* spinning had actually been less than two inches and a half. It was held by the Court of Common Pleas that the adoption of a particular distance, viz. two inches and a half, under these circumstances, did not constitute such an invention as would support a patent. 'Suppose,' said *Tindal, C. J.*, on delivering judgment —'suppose a patent to have been first obtained for some entirely new method, either chemical or mechanical, of reducing the fibres of flax to a short staple, we think that a second patent could not be taken out for an improved mode of machinery in spinning flax which consisted of nothing more than the spinning of short staple of flax by a spinning machine of a reach of a given length, not less than that already in use for the spinning of cotton, the effect of which would be to prevent the first patentee from working his invention with the old machine at the proper reach.' Or, as *Lord Cottenham* put it in the House of Lords, if the plaintiff (Kay) has a right to tell the rest of the world that they shall not use the common spinning machine with rollers at two and a half inches distance, then the existence of the patent deprives all the rest of the world of the right of using the ordinary spinning machine in

the form in which they had a right to use it before the patent was granted.

In *Parkes* v. *Stevens* (L. R. 8 Eq. 358), *James, V. C.*, was of opinion that the substitution of a slide for a hinge in the door of a lamp could not be the foundation of a valid patent. And in the same case (affirmed L. R. 5 Ch. D. 36) it was held that the application of a sliding door to a *spherical* lamp was not patentable, as it was proved that sliding doors had been previously fitted to *cylindrical* lamps.

When it was shown that there existed a previous patent for preserving meat already salted, dried or smoked, by dipping it into a solution of bisulphide of lime, it was held that an invention the object of which was to preserve *fresh* meat by dipping it into a like solution, was not patentable (*Bailey* v. *Roberton*, L. R. 3 App. Ca. 1079).

In the case of *Saxby* v. *The Gloucester Waggon Company*, which was carried to the House of Lords, it was decided by that tribunal (June 25, 1883), as it had been by all the courts below, that a combination of an old locking apparatus with an old actuating apparatus for working railway signals and points, did not display a sufficient amount of invention to support a patent, it having been proved that the combination was effected by obvious means and in a way that did not call for more than ordinary mechanical skill.

The discovery that a particular advantage may be obtained by using a known machine in a known manner is not a patentable invention (*Tetley* v. *Easton*, 2 C. B. N. S. 706).

In the process of calendering woven fabrics the use of a roller and a bowl, and the means of regulating the relative speed of their motions, were well known. In the process of *calendering*, the roller was smooth, and the speeds of the roller and bowl were different. In

embossing, the roller had a pattern upon it, and the speeds of the roller and bowl were equal. A patent was taken out for a combination of a patterned roller with a bowl moving at unequal speeds. The invention was held not to be one which could be the subject of a valid patent, as it amounted to nothing more than how to use an existing machine more beneficially than had been previously known. Although the patentee might have discovered that by making the *patterned* roller and the bowl move at different speeds instead of at the same speed, and by moving the fabric transversely when fed up, the machine could be worked more advantageously than formerly, he had no right to prohibit the owner from using his property as he thought fit. (*Ralston* v. *Smith*, 9 C. B. N. S. 117; affirmed by the *House of Lords*, 11 H. L. C. 223.)

In the case of *Patterson* v. *The Gas Light and Coke Company* (L. R. 2 Ch. D. 812, L. R. 3 App. Cas. 239) a patentee claimed the employment of sulphides of calcium in separate purifiers as a means of purifying coal gas from sulphur existing in other forms than that of sulphuretted hydrogen. Now, as it was well known to chemists, and had been long taught in books, that sulphides of calcium would absorb sulphur compounds —moreover, as it was plain that if sulphide of calcium was to be used, a separate holder must be employed, and as no special apparatus was suggested, it was held that there was no invention that would support a patent. The same patentee also claimed a method or system of employing lime purifiers in succession, whereby the contents of all the purifiers, or any required number of them, could be converted into sulphides of calcium, and also, if required, be maintained in that condition. Now, lime purifiers in succession had been in general use for a long time, and the patentee had not devised either a new process or any

new apparatus. What he really thought he had discovered was that, if the carbonic acid, which is the first thing taken up by the lime, was allowed to enter the last purifiers, it would have a deleterious effect on the purifying process. It ought, therefore, to be removed at the beginning of the operation. But this, though it might be a very useful piece of advice, and an instruction of great value, was held by the Court of Appeal not to constitute of itself the subject-matter of a patent.

Other cases in which the inventions were held to be insufficient to support patents were *Thompson* v. *James* (32 Beav. 570), and *White* v. *Toms* (32 L. J. Ch. 204).

Upon the question of what is subject matter of patentable invention, reference may usefully be made to the judgment of *Grove, J.* in *Young* v. *Rosenthal*, (1 R. P. C. 30.)

SECOND PATENTS.

In *Lister* v. *Leather* (8 E. & B. 1004) it was held that a second patent for an improvement on an invention which is the subject of a previous patent afterwards assigned to the second patentee is not void as being contrary to public policy. And the same rule holds good in regard to a second patent obtained by the same inventor. The argument that the second patent prolongs the monopoly granted by the first until the expiration of the second is answered by the fact that the former invention without the improvement is free as soon as the earlier patent comes to an end.

CHAPTER III.

THE INCIDENTS OF UTILITY AND NOVELTY WHICH MUST BY LAW ACCOMPANY PATENTABLE INVENTIONS.

THE two chief incidents which are required by law to attend every invention that claims the protection of a patent, are utility and novelty.

If a material part of the alleged invention should turn out to be either not useful or not novel, the patent is altogether void, the legal maxim *utile per inutile* being here disregarded. (See *Crossley* v. *Beverley* W. P. C. 106; *Hill* v. *Thompson*, 1 W. P. C. 249; *Manton* v. *Parker*, 1 W. P. C. 192 *n.*; Dav. P. C. 327; *Bloxam* v. *Elsee*, 6 B. & C. 169; 1 Carp. 444; *Roberts* v. *Heywood*, 27 L. T. N. S. 454; *Hill* v. *Tombs*, April 1881, 'Engineer,' 51, p. 274.) And in like manner, where several distinct heads of invention are included in one patent, one useless or old invention will invalidate the whole patent (*Turner* v. *Winter*, 1 W. P. C. 77; 1 T. R. 602; *Bloxam* v. *Elsee*, 6 B. & C. 178; *Morgan* v. *Seward*, 1 W. P. C. 196; *Kay* v. *Marshall*, 2 W. P. C. 71). The Crown having been misled as to the extent of the invention, the grant of a patent in respect of it is void. It was on this principle that the Court, in deciding *Morgan* v. *Seward*, looked at the cases of *Hill* v. *Thompson* (1 W. P. C. 237), and *Brunton* v. *Hawkes* (4 B. & A. 541); in which a patent for several inventions was held to be altogether void because one was not new. The want of *novelty* is a fatal defect by the express wording of the statute, so far as

relates to that which is old; and the whole patent is rendered void by the construction that the consideration for the grant is the novelty of all the parts claimed to be new, which consideration failing, or, as it is sometimes expressed, the Crown being deceived, the patent is void.

As it is of the utmost importance to ascertain what construction the courts have put upon the terms new and useful when applied to patented inventions, and how they have administered the law in dealing with the cases that have come before them, it will be necessary to go into the matter at some length. And first as to the question of

UTILITY.

If an invention contains no degree of usefulness whatever, over and above inventions already known, then the patent is void. (*Manton* v. *Parker*, Dav. P. C. 327; W. P. C. 192 *n.*; *Manton* v. *Manton*, Dav. P. C. 348.)

'A mere trifling matter' (said *Sir W. P. Wood, V. C.*, in *Dangerfield* v. *Jones*, 13 L. T. N. S. 142) 'or a thing of no value will not do, inasmuch as the whole theory of the patent law is based upon the assumption that it is something of real value. You must show that you have invented something useful, a new and useful improvement in manufacture.'

A patent for a useless invention is thought by some to be void at common law; by others, by force of the Statute of Monopolies, which renders void grants of privileges which tend to the hurt of trade, or are generally inconvenient. For if a monopoly were allowed in a useless invention, other persons would be prevented from improving it, or turning it to any account whatever, so that combinations of utility might be impeded. It would stand in the way of real inventors, and hence be mischievous to the public generally.

(See the observations of *Parke, B.*, in *Morgan* v. *Seward*, 1 W. P. C. 196.) On the trial of *Palmer* v. *Wagstaff* (Newton's Lond. Journ. vol. xliii. p. 151), *Chief Baron Pollock* said that in legal language it is a fraud on the law of patents for any person to take out a patent with a view to the obstruction of improvements. The evidence showed that the plaintiff's patent, which it was alleged the defendant had infringed, had never been worked; no attempt had been made to bring the candles of the patented construction before the public; and the patent was only then brought into play for the purpose of stopping the defendant from a course of improvement.

'A patent for an invention which is merely to obstruct every subsequent improvement, which is to step in and prevent the exercise of the ingenuity of mankind and the introduction of other inventions adapted to the particular subject to which the invention may be applicable, cannot, in my judgment, be supported.' (Per *Pollock, C. B.*, in *Crossley* v. *Potter*; Macr. P. C. 240.)

It is to be observed that the recital in the Letters Patent of the Crown's willingness 'to encourage all inventions which may be for the *public good*,' clearly points to the quality of utility as one of the considerations for the grant, which failing, the patent will be invalid.

When an action is tried before a jury, it is for them, not the Court, to decide the question of utility when the point has been raised by appropriate pleadings;[1]

[1] That the patentee must go into proof of the utility of his invention in case that issue is raised is shown by what fell from the judges in the cases of *Rex* v. *Arkwright*, Dav. P. C. 138; *Manton* v. *Parker*, Dav. P. C. 327; *Manton* v. *Manton*, Dav. P. C. 333; *Bovill* v. *Moore*, Dav. P. C. 399; *Brunton* v. *Hawkes*, 4 B. & Ald. 541; *Russell* v. *Cowley*, 1 W. P. C. 467; *Hill* v. *Thompson*, 1 W. P. C. 237; *Minter* v. *Wells*, 1 W. P. C. 129; *Crane* v. *Price*, 1 W. P. C. 411; *Derosne* v. *Fairie*, 5 Tyr. 393; 2 Cr. M. & R. 476.

and the question will go before them in the general shape of utility or no utility. They have not to consider to what extent the invention is useful, but only whether it is of any use at all. *Mr. Baron Parke*, in *Neilson* v. *Harford* (1 W. P. C. 314), speaking of a patent for the use of hot-blasts in furnaces, laid it down that if the apparatus were an improvement, so as to be productive, practically, of some beneficial result, no matter how great, provided it is sufficient to make it worth while (the expense being taken into consideration) to adapt such an apparatus to the ordinary machinery in all cases of forges, cupolas, and furnaces, where the blast is used, then that there would be utility sufficient to support the patent. The *quantum* of improvement (should an improvement be in dispute) is not a material point; it is enough that they can find *any* improvement. (*Alderson, B.*, in *Morgan* v. *Seward*, 1 W. P. C. 172, 186.) In other words, in order to quash a patent on this ground, a jury must expressly find that the invention is of no use.

But it must be kept in mind that it is the *invention* which is required to possess utility, not merely the thing produced. As *Pollock, C. B.*, remarked, on trying the case of *Palmer* v. *Wagstaff* (above cited), it is not sufficient for the maintaining of a patent to prove that the article produced under it is useful; it must be the invention that effects the utility. Thus a patented manufacture should be either better in quality, or cheaper in cost, than that which it is intended to supplant.

It has been held, however, that the uselessness of part of an invention will not vitiate the patent, unless that part is described as something essential. The case of *Lewis* v. *Marling* (1 W. P. C. 490) arose out of a patent for an improved machine for shearing woollen cloths, in which the patentee claimed, amongst other

things, the use of a brush for raising the wool on the surface of the cloth to be shorn, but not as an essential part of the machine. Before any machine was made for sale this part of the invention was discovered to be useless, and no machines were ever sold with the brush attached. It was contended that this uselessness of part vitiated the whole, but *Lord Tenterden* said, 'If the patentee mentions that as an essential ingredient in the patent article which is not so, nor even useful, and whereby he misleads the public, his patent may be void; but it would be very hard to say that this patent should be void, because the plaintiffs claim to be the inventors of a certain part of the machine not described as essential, and which turns out not to be useful.' *Bayley, J.*, thought that if the patentee had known the brush to be unnecessary, the patent would be bad, on the ground that this was a deception; but if he believed it to be proper, and only by a subsequent discovery found out that it was not necessary, it would form no ground of objection.

In the case of *Haworth* v. *Hardcastle* (1 W. P. C. 480) the jury found specially that the invention was useful upon the whole, but that the machine was not useful in some cases. The judges of the Court of C. P. thought that this finding of the jury did not negative the utility of the machine in the generality of cases, but rather led to the inference that in the generality of cases it was useful, and the patent was therefore held to be valid.

Brunton took out a patent for an improvement in chain cables, which consisted in making the links with straight sides and circular ends, in place of twisted links, and in substituting a cast-iron stay with broad ends embracing the sides of each link for a wrought-iron stay formerly fixed across the middle of the opening of the link to prevent it collapsing. The combina-

tion of a link with a stay of those particular forms was considered so far new, although the form of the link had been previously known, that the inventor would have had the benefit of his patent, upon his showing that the combination operated beneficially, if the patent had been obtained for this combination alone (*Brunton* v. *Hawkes*, 1 Carp. R. 412).

If an improvement of the trade (using these words in their commercial sense) has taken place in consequence of an invention, this affords a good test of its utility. The invention patented by Lord Dudley consisted in substituting pit-coal for charcoal in the manufacture of iron. Neilson patented a process of smelting iron by blowing the furnace with hot in place of cold air. Crane smelted iron by means of anthracite instead of ordinary fuel, and combined the hot-blast with this. All these processes were productive of great improvements in the manufacture of iron, and the patents were all supported by the Courts.

It has been said from the Bench, that the fact of a published invention not meeting with public acceptance, is some presumption against its utility. It is something for a jury to take into consideration, when the question of utility is raised before them, that a machine has not been called for by the public (*Morgan* v. *Seward*, 1 W. P. C. 186). See also *Re Simister's Patent* (1 W. P. C. 721; 4 Moo. P. C. C. 164); *Re Bakewell's Patent* (15 Moo. P. C. C. 386); *Re Allan's Patent* (L. R. 1 P. C. 507).

It has also been said that if the invention is not worked by the inventor that fact is *primâ facie* evidence of want of utility. But 'that' (said *Jessel*, *M. R.*, in delivering judgment in the case of *Otto* v. *Linford*, 46 L. T. N. S. 35) 'is subject to this observation, that you may make and vend an improvement upon it, and if you have found out immediately

after you have patented your invention that it can be improved, it does not by any means show that the first invention was useless.' Then referring to the case of *Renard* v. *Levinstein* (10 L. T. N. S. 177), which arose out of a patent for a dye, he said, 'There they never sold an ounce of dye made according to the patent because immediately afterwards the inventor had discovered an improvement, and they had always sold the improved dye, and they were obliged to call a witness to show that they had made a few ounces of dye and tried it, and that it would dye. The answer was that under those circumstances the mere fact of not selling the original dye was nothing at all. So in this case (*Otto* v. *Linford*) we have rather a stronger illustration, because the inventor has patented these modifications, and it turns out that what he has used, made and sold, have been almost entirely number threes. No. 1 itself does not appear ever to have been sold. But then they say that No. 1 will work, and they call witnesses to prove it, and there is no denial from the other side. Therefore there is evidence of utility. It is very small indeed as regards No. 1, but it is quite sufficient for the support of a patent; and as to this question of utility, as we know, very little will do.'

We now turn to the question of

NOVELTY.

The statute of James declares excepted from the invalidating clause 'all letters patent and grants of privilege of the sole working or making of any manner of *new* manufactures to *the true and first inventor* of such manufactures, *which others at the time of making such letters patent and grants should not use.*' Moreover, the patent contains clauses rendering the grant voidable in case the invention is not a new invention as to the public use and exercise thereof, or in case

the patentee is not the true and first inventor of the invention.

On the point of novelty three questions may arise for consideration: first, is the invention itself a new one; second, if new, was the patentee the true and first inventor thereof? and then, was there any user of the invention in public or by the public before the date of the patent?

With regard to the first point, we may remark that the alleged invention may turn out to be of such an insignificant character that the courts are unable to find any novelty in it sufficiently great to entitle it to a patent, and they will refuse to uphold the grant if it should be contested. In this connection we may here consider what are commonly termed

PATENTS FOR 'APPLICATIONS.'

These are patents by which it is sought to protect inventions having reference to the application of an existing article to a purpose for which other similar articles have been previously used; or to the application of a well-known process to produce a well-known article; or to the application of a well-known process to effect a result in a well-known article after the same process had been publicly applied to an analogous article. When there is nothing new in the machinery or methods employed, patents for such applications are not favoured by the law, which looks upon the inventions as wanting in the attribute of novelty. The rule is well established that the mere application of an old mechanical contrivance to an analogous purpose is not an invention for which a patent can be granted. 'In all the cases in which a patent has been supported' (said *Lord Campbell* in *Brook* v. *Aston*, 8 E. & B. 478) 'there has been some discovery, some invention. It has not been merely the application of the old

machinery in the old manner to an analogous substance. That cannot be the subject of a patent.'

In *Harwood* v. *Great Northern Railway Company* (2 B. & S. 208), *Cockburn, C. J.*, said 'Although the authorities establish the proposition that the same means, apparatus, or mechanical contrivance, cannot be applied to the same purpose, or to purposes so nearly cognate and similar as that the application of it in the one case naturally leads to the application of it when required in some other, still the question in every case is one of degree, whether the amount of affinity or similarity which exists between the two purposes is such as that they are substantially the same; and that determines whether the invention is sufficiently meritorious to be deserving of a patent.'

The following cases will illustrate the law as thus laid down by these learned judges:—

The casting of tubular boilers in one piece, similar boilers having been previously made in several pieces which were afterwards fastened together by means of cement, was held not to be an invention for which a valid patent could be obtained, although the result was useful and beneficial to the public. It was only the application of a well-known article, viz. iron, by a well-known process, viz. casting, to the production of a well-known article, tubular boilers. (*Ormson* v. *Clark*, 13 C. B. N. S. 337; *S. C.* in error, 14 C. B. N. S. 475.)

Again, the application of *double*-angle iron (a well-known article of commerce already applied to a variety of purposes) to the construction of hydraulic joints of telescopic gas-holders, instead of making them of two pieces of *single*-angle iron attached to a plate, was held not to be patentable. (*Horton* v. *Mabon*, 12 C. B. N. S. 437; *S. C.* in error, 16 C. B. N. S. 141.)

From what was said in *Mackelcan* v. *Rennie* (13 C. B. N. S. 61), it would appear that the Court con-

sidered that the application in the construction of a known apparatus of a material not before used for that purpose, for example, iron instead of timber in the construction of floating docks, was not an invention for which a valid patent would be obtained.

'The use of a new material to produce a known article is not the subject of a patent,' said *Malins, V. C.*, in *Rushton* v. *Crawley* (L. R. 10 Eq. 522), a case where a man had taken out a patent for the use of a kind of wool called Russian tops in the manufacture of artificial hair. (See also *Thompson* v. *James*, 32 Beav. 570.)

In the case of *Losh* v. *Hague* (1 W. P. C. 202) the question was reduced to this—Is a man who finds a particular construction of wheel already in use for carriages on ordinary roads entitled to a patent for applying it to railway carriages, such application not having been previously made? *Lord Abinger* remarked that you cannot have a patent for applying a well-known thing, capable of being applied to fifty thousand different purposes, to an operation which is exactly analogous to what was done before. His lordship put this case:—'Suppose a man invents a pair of scissors to cut cloth with; if the scissors were never invented before, he could take out a patent for it. If another man found he could cut silk with them, why should he take out a patent for that?' Again—'It would be a very extraordinary thing to say, that after all mankind have been accustomed to eat soup with a spoon, that a man could take out a patent because he says you might eat peas with a spoon.'

In an action for the alleged infringement of a patent for improvements in separating the fibres of cocoa-nut husks, it was shown that the principal part of the invention consisted in passing the split husks between crushing rollers, and that, for some time previous to

the date of the patent, similar rollers had been employed in treating hemp. *Lord Campbell*, who presided at the trial, told the jury that the use of the crushing rollers having been thus anticipated, no claim for their application to the crushing of cocoa-nut husks would hold good. (*Hyde* v. *Trent*, Newton's Lond. Jour. vol. 45, p. 135.)

So, in the case of *Regina* v. *Cutler* (Macrory's Pat. Ca. 124–138), it was held by two judges on different occasions, that the mere application of a known article to a new use, the mode of application having been previously employed in applying analogous articles to the same purpose, cannot be made the subject of a patent. In this case the patent was for improvements in the construction of the tubular flues of steam boilers. The specification claimed the application of iron tubes coated with copper or brass to this purpose. This kind of tube was not new; nor was there any novelty in the way the patentee applied the tubes in the construction of flues, uncovered tubes having been previously used in a similar way.

In *The Patent Bottle Envelope Co.* v. *Seymer* (5 C. B. N. S. 164) it was held that the use of a model or mandril in the form of a bottle in making envelopes for bottles out of rushes or straw, could not be the subject of a patent, this being merely the application of a well-known tool to work previously untried materials or to produce new forms.

On the trial of *Bush* v. *Fox* (Macr. P. C. 163), it appeared that the invention, for an infringement of which the action was brought, consisted in the use of a caisson or hollow cylinder for building under water. It was proved at the trial that a similar caisson for building on land had been described in the specification of a patent granted several years previously. This, therefore, was only a new application of a machine pre-

viously applied to another purpose. 'I think' (said *Pollock, C. B.*, to the jury) 'that a man cannot, if he has applied an old invention, or part of an old invention to a new purpose, obtain a patent for such an invention. Both the plaintiff and the other witness say that the invention consists in the application, and not in the novelty of the thing itself—in other words, that the only novelty is in the application of the apparatus. I think that a patent cannot be taken out for such an application. If a man were to take out a patent for a telescope to be used to make observations on land, I do not think any one could say, "I will take out another patent for that telescope to be used for making observations on the sea."' When the legal points raised at the trial were argued in the Exchequer Chamber, *Maule, J.*, said, 'Assuming that the machine itself is old, the learned judge held that a mere new application is not a new manufacture, and therefore not the subject of a patent; and my present opinion is that, on the evidence, he was right in so directing the jury' (Macr. P. C. 175). The case having been taken to the House of Lords (Macr. P. C. 179), it was there held that the judge's direction was right.

In *Brook* v. *Aston* (8 E. & B. 478), the plaintiffs had obtained a verdict in an action for an infringement of their patent granted in 1856, for improvements in finishing yarns of wool and hair; but the defendant obtained leave to move to enter the verdict in his favour if the Court should be of opinion that the patent was invalid. It appeared that the plaintiff had obtained a patent in 1853, for a process precisely similar except that it was applicable to the finishing of cotton and linen yarns. After argument, the Court held that as the alleged invention under the later patent was only the application of an old machine in an analogous manner to another but similar object, there had been

no improvement or discovery for which a patent could be obtained. This decision was affirmed by the Court of Exchequer Chamber (5 Jur. N. S. 1025).

In the case of *Harwood* v. *The Great Northern Railway Company* (2 B. & S. 194; 11 H. L. C. 654) a patent for the application of 'fishes' to iron rails for railways, for the purpose of securing them, was held invalid, because a similar contrivance had been applied to fasten pieces of timber together in the construction of bridges, and had also been used in various articles of machinery. As *Mr. Justice Willes* said, the invention for which the patent had been obtained was 'the mere application of an old contrivance in the old way to an analogous subject without novelty or invention in the mode of applying such old contrivance to the new purpose.'

Jordan's specification claimed the construction of ships with an iron frame combined with an external covering of timber planking for the sides, bilges, and bottoms. At the trial of an action for an infringement of the patent, it appeared that a combination of wood and iron in the construction of ships was well known previous to the patent, and that frames partly of iron and partly of wood had been coated with iron. The jury having returned a verdict in favour of the plaintiff, the patentee, a rule was obtained for leave to enter a verdict for the defendant on the ground that the invention was not patentable. The Court decided that as iron and wood had both been long used in the construction of vessels, the application of wooden planking to the iron frame of a vessel, without any peculiarity in the nature of that planking, could not be the subject-matter of a patent. The alleged invention was as to one part nothing more than the substitution of one well-known and analogous material for another—that is, wood for iron—to effect the same

purpose on an iron vessel; and as to another part, it was the application of the same old invention, viz. planking with timber, which had been formerly done on a wooden frame, for an analogous purpose on an iron frame. (*Jordan* v. *Moore*, L. R. 1 C. P. 624.)

The use of a guide in a frilling machine for the purpose of keeping down the work, was held by *Jessel, M. R.*, in *Hill* v. *Tombs* ('Engineer,' April 15, 1881, p. 274), not to be a patentable invention, because 'that was the use of known means for an analogous purpose,' guides of similar character having been employed in many other machines.

Compare the preceding cases with *Penn* v. *Bibby* (L. R. 2 Ch. 127). Mr. John Penn obtained a patent for an improvement in bearings and bushes for the shafts of screw propellers, which consisted in grooving the inner surfaces of the bearings of the shaft, and placing in the grooves strips of wood, which projected beyond the inner surface of the metal bearings, so as to support the rubbing action of the shaft whilst water was allowed to circulate freely in the intermediate channels. The metal bearings previously employed had been found unable to withstand for any length of time the friction of the screw shaft, and it almost seemed as if the screw propeller would have to be abandoned; but Mr. Penn's simple contrivance got over the difficulty, and the invention came into general use. It was contended that the alleged invention was merely a new application of an old and well-known thing, viz. wood, and the wooden bearings of grindstones and waterwheels were adduced as showing that the invention was not novel. 'In every case of this description' (said *Lord Chelmsford*), 'one main consideration seems to be whether the new application lies so much out of the track of the former use as not naturally to suggest itself to a person turning his mind

to the subject, but to require some application of thought and study. Now, strictly applying this test to the present case, it appears to me impossible to say that the patentee's invention is merely the application of an old thing to a new purpose. The only examples of old use . . . are of a totally different character, and for a totally different object. It is difficult to believe that bearings of this description could ever have suggested the application of wood to the bearings of screw propellers in the way described in the patent.'

A patent was obtained for improvements in the manufacture of glass. The invention consisted of a mode of forming the sides of the chambers, where the materials were fused, in such a manner that a current of cool air might circulate and so prevent over-heating. Although the principle was previously known, yet, as the contrivance when applied to the manufacture of glass rendered the process of melting less costly and less dangerous, the patent was held good. (*Cannington* v. *Nuttall*, L. R. 5 H. L. 205.)

The same distinction, which, it has been seen, is made between mechanical applications brought about by an obvious exercise of the inventive faculty and those where it is scarcely appreciable, holds good with regard to the applications of the chemical properties of matter. Thus, in *Calvert* v. *Ashburn* (Pract. Mech. Journal, vol. vii. 2nd ser. 97), it was held that the application of caustic alkalies for the purpose of dissolving the gluten contained in flour employed in the manufacture of *size* could not be the subject of a patent, inasmuch as caustic alkalies had been previously used for the purpose of dissolving gluten in the manufacture of *starch*. See also the observations of Lord Hatherley and Lord Blackburn in *Bailey* v. *Roberton* (L. R. 3 App. Cas. 1055, 1073, 1079).

This case, in which the amount of invention was

adjudged too small to support the patent, should be compared with that of *Young* v. *Fernie* (4 Giff. 597, 612), a suit for an injunction to restrain the infringement of a patent for obtaining paraffine oil by the distillation of bituminous *coals*, wherein it was proved that previously to the plaintiff's invention paraffine oil had been extracted from bituminous *shale* by distillation. It was argued for the defendants, on the authority of *Regina* v. *Cutler*, *Brook* v. *Aston*, and such cases, that bituminous shale being a substance analogous to bituminous coal, the invention of the plaintiff was not in law the subject of a patent. But *Stuart*, *V. C.*, said that there seemed to be no analogy between the cases cited and the present one. And in giving judgment in favour of the validity of the patent, his Honour observed, 'Inventions in mechanics are as widely different from inventions in economical chemistry as the laws and operations of mechanical forces differ from the laws of chemical affinities, and the results of analysis and experiment in the comparatively infant science of chemistry, with its boundless field of undiscovered laws and undiscovered substances. This observation, as applied to reported cases, will strike the mind of every lawyer who has even a slight elementary knowledge of both sciences.' (See also the case of *Muntz* v. *Foster*, *ante*.)

In *Hills* v. *London Gas Light Company* (5 H. & N. 369), an action upon a patent for the purification of coal gas by the use of hydrated oxides of iron, it was argued that as the property which these oxides possess of combining with sulphuretted hydrogen, the deleterious part of unpurified coal gas, was a perfectly well-known property, the mere application of the oxides to remove sulphuretted hydrogen from gas could not be the subject of a patent. The Court of Exchequer held that if a man were simply to say that he claimed the

use of hydrated oxides of iron for the purification of gas, without saying how they were to be applied, the objection might possibly be well founded; but as the patentee had shown how the oxides were to be used, the objection failed. (Comp. *Ormson* v. *Clarke*, 13 C. B. N. S. 337; in error, 14 C. B. N. S. 475.)

Two distinct issues are usually raised upon the pleadings in regard to the question of novelty: 1st, whether the patentee is the 'true and first' inventor of the patented invention; and 2nd, whether the subject-matter of the patent is a new invention as to the public use and exercise thereof.

TRUE AND FIRST INVENTOR.[1]

Before examining the decisions which bear upon the questions of prior publication and public user, it may be well to advert to those which have reference to the person who asserted himself to be the true and first inventor when application was made for the patent. A discovery may be both useful and quite new to the world at large; yet if it can be shown that the person, upon whose solemn declaration that he was the true and first inventor the patent was granted, does not really answer to that designation, the patent is not saved from the clause in the statute of James, which declares that all monopolies are invalid. Let us therefore inquire what construction the courts have put upon the words 'true and first inventor.'

[1] It must be kept in mind that the word 'patentee' in this section signifies, in the case of a patent granted to several persons jointly under the Act of 1883, only the person who claimed to be the inventor of the subject-matter of the patent, and does not include other non-inventors who may have joined him in obtaining the grant.

Moreover, it will be seen in the next chapter that the importer of an invention from abroad is held by the courts of law to fall within the meaning of the words 'true and first inventor.'

One of the earliest cases on this subject is that of Dollond, the optician, who brought an action for an infringement of his patent for a new method of making the object-glasses of refracting telescopes. It was alleged, on the part of the defendant, that Dollond was not the true and first inventor of the method, inasmuch as Dr. Hall had made the discovery before him. But it was holden that as Dr. Hall had confined it to his closet, and had not communicated it to the public, Dollond was to be considered the first and true inventor as required by the statute. This decision has been frequently mentioned in subsequent cases, and always with approval.

The case was not reported, and our knowledge of it is derived from the mention made of it in the case of *Boulton* v. *Bull* (2 H. Bl. 469). Dollond's case was decided in 1766, and it was followed by numerous cases, the result of which may be thus stated:—If two persons make the same invention about the same time independently of each other, he who first obtains a patent has an exclusive right to the invention (*Forsyth* v. *Riviere*, Chit. Prerog. Cr. 182); and he will be held the first inventor, although, in point of fact, the date of his invention was subsequent to that of the other person, provided that there was not such a use of the invention previously to the patent as amounted to what is technically called 'public use.'

In *Lewis* v. *Marling* (1 W. P. C. 496), *Bayley, J.*, said, 'If I make a discovery, and am enabled to produce an effect from my own experiments, judgment, and skill, it is no objection that some one else has made a similar discovery in his mind, unless it has become public.' And *Parke, J.*, said, 'There is no case in which a patentee has been deprived of the benefit of his invention because another had also invented it, unless he had also rought it into use.' Again, in the case of *Hill* v

Thompson (1 W. P. C. 244), *Dallas, J.*, said, 'It is not enough to have discovered what was unknown to others before, if the discovery be confined to the knowledge of the party having made it; but it must have been communicated more or less, or it must have been more or less made use of, so as to constitute discovery as applied to subjects of this sort.'

'A man may publish to the world,' said *Tindal, C. J.*, in *Gibson* v. *Brand* (1 W. P. C. 628), 'that which is perfectly new in all its uses, and has not before been enjoyed, and yet he may not be first and true inventor; he may have borrowed it from some other person; he may have taken it from a book; he may have learnt it from a specification; and then the Legislature never intended that a person who had taken all his knowledge from another, from the labours and assiduity or ingenuity of another, should be the man who was to receive the benefit of another's skill.'

But, in order to break down the patent of the person who was *de facto* the first to produce a useful article by the patented process, by means of which that article can be offered to the public at an economical rate, the fact of anticipation, if that is relied on, must be very clearly made out. *Von Heyden* v. *Neustadt* (50 L. J. N. S. Ch. 126.)

Many substances have been produced by chemists in their laboratories in small quantities, which, if they could be produced in large quantities at a moderate cost, so as to be merchantable commodities, would be extensively used by the public. An inventor who succeeds in doing this will not be considered to have been forestalled because the substance has been already produced on a small scale as a chemical curiosity. He will be held to have been the true and first inventor, and his patent will be supported because he has discovered a method of making for sale an article useful

to the public, and has thereby created a new manufacture. 'What the law looks to,' said *Stuart, V. C.*, in the case of *Young* v. *Fernie* (4 Giff. 611), 'is the inventor[1] and discoverer who finds out and introduces a manufacture which supplies the market for useful and economical purposes with an article which was previously little more than the ornament of a museum. The plaintiff is an inventor of this class, and his patent is entitled to the protection of the law. I find that he has ascertained by a course of laborious experiment a particular class of materials among many, and a particular process among many, which has enabled him to create and introduce to the public a useful manufacture, which amply supplies the market with that which, until the use of the materials and processes and temperature indicated by him, had never been supplied for commercial purposes. At the date of his patent something remained to be ascertained which was necessary for the useful application of the chemical discovery of paraffine and paraffine oil. This brings it within the principle stated by *Westbury, L. C.*, in the case of *Hills* v. *Evans* (4 De G. F. and J. 288). The manufacture with the materials and process indicated by him, according to the sense in which I understand the word "manufacture" to be used in the statute, was a new manufacture not in use at the date of his patent.'

It is sometimes argued that a patentee is not to be deemed the true and first inventor, if a patent for a similar object had been previously obtained by another inventor; but this objection will not prevail when it can be shown that the means by which the object is attempted to be accomplished are substantially different in the two cases.

[1] The inventor in this case was referred to by Professor Huxley, P.R.S., in his Anniversary Address to the Royal Society 1883, as 'Mr. James Young, a chemist whose skilful application of theory to practice yielded him a colossal fortune.'

Kneller obtained a patent for an apparatus for the evaporation of liquids and solutions at a low temperature. The apparatus consisted of pipes or tubes, along which air was forced nearly to the bottom of the vessel containing the liquid to be evaporated, which air, passing through small holes in the submerged tubes, traversed the liquid and carried off the aqueous particles. The invalidity of this patent was attempted to be proved by showing that an invention having a similar object in view had been previously patented. But when it appeared that this invention consisted in propelling a quantity of heated air into the lower part of the vessel containing the liquid, and causing such air to pass through the liquid in streams, by means of a perforated coil of pipe or colander, the jury found that, although the substance of both inventions consisted in forcing air in finely divided streams through a fluid, for the purpose of facilitating evaporation, yet the modes by which this was effected in the two cases were sufficiently distinct to acquit the latter invention of being a piracy of the former; and that the latter patent was not invalidated by reason of want of novelty in the invention. The Court was of the same opinion, upon the application for a rule to set this verdict aside. (*Hullett* v. *Hague*, 1 Carp. Rep. 501; 2 B. and A. 370.)

In *Minter* v. *Mower* (1 W. P. C. 140) it appeared that the plaintiff had taken out a patent for an improvement in reclining chairs, which consisted in the application of a self-adjusting leverage to the back and seat of a chair, whereby the weight on the seat acted as a counterbalance to the pressure against the back. Mower, the defendant, made chairs in imitation of Minter's chair, and contended, in an action for an infringement of the patent, that the plaintiff was not the first and true inventor, alleging that one Brown had, pre-

viously to the patent, made chairs embodying a similar principle. It appeared, however, that although Brown's chair contained a similar principle to that patented, it was encumbered with machinery which rendered it a very different thing from the plaintiff's. *Lord Denman* said that, supposing Brown's chair to have been a chair with a self-adjusting leverage (*i.e.* a chair similar to the plaintiff's), if the encumbering additional part had been away, 'then the question is, whether the principle of self-adjustment was at all discoverable or thought of at that time. Because, it seems to me, if that principle might have been deduced from the machinery of the chair that was made, but it was so encumbered and connected with other machinery that nobody did make that discovery, or ever found out that they could have a chair with a self-adjusting leverage, by reason of that or any other defect in the chair actually made; it seems to me that does not prevent this from being a new invention, when the plaintiff says, I have discovered, throwing aside everything but this self-adjusting leverage itself, something that will produce an effect, which I think a very beneficial one.'

One of the most recent cases relating to the question of prior publication was that of *Saxby* v. *The Gloucester Waggon Co.* (Court of App., June 23, 1882: *S. C.*, House of Lords, June 25, 1883). Saxby obtained a patent in 1874 for improvements in signalling apparatus on railways. The invention comprised a combination of two old contrivances having the same object in view. To show prior publication the following facts were proved. The particular improvement in question had been previously suggested to the mind of a Mr. Edwards, who was in the employment of the London and North-Western Railway Company, and who, by merely placing the two old contrivances side by side, had made

working drawings, which it was admitted showed a combination substantially the same as Saxby's subsequently patented modification. Two sets of tracings were made from the drawings in Edwards' office, where four or five draughtsmen were kept, and they were afterwards sent to the offices of the L. & N. W. R. Company at Crewe, where there were seventeen or eighteen draughtsmen. The general public visited these offices, and there was evidence that the drawings or tracings had there been seen by an engineer who was not in any way connected with the railway company. No secrecy or concealment was imposed or observed in regard to the drawings and tracings with reference either to the draughtsmen in these two offices or to members of the general public who might happen to visit them. Further, the particular combination had been explained by Edwards to a person in Saxby's employment, and rough sketches of the drawing were left with him. The drawings and tracings were laid before the chief engineer of the railway company, and they were submitted to their locomotive committee. Besides all this a working apparatus was made from the drawings by a person in the employment of the company, and this was placed in the pattern-shop, where it was subjected to trial. All this occurred before the end of the year 1873. It was held by a Divisional Court, by the Court of Appeal, and by the House of Lords, that these facts amounted to evidence of a publication of the invention; that such a disclosure of it had been made as placed it within reach of the public, and therefore that Saxby's patent was invalid.

The fact that there had previously been made a useless machine which turned out a failure will not invalidate the right of a patentee who has made a successful machine with the same object, although there may be a certain degree of similarity between some of the

details of the two machines (*Murray* v. *Clayton*, 7 L. R. Ch. 570).

It may happen that a given invention results from the combined operation of two or more minds, in which case it is necessary that all the inventors should apply for the patent.

Patents have sometimes been disputed on the ground that the patentee owed a material part of the invention to another person;[1] and if this can be made out on satisfactory evidence, it is fatal. It must, however, be taken to be undoubted law, that the suggestions of workmen employed by the inventor to carry out his ideas will have no such effect. An inventor is entitled to something more than the mere manual labour of the persons he employs. If the substantial part and leading idea, the principle of an invention, belong to one person, he may properly call in the assistance of another to work it out and improve it; and after obtaining the benefit of that assistance, he may legally procure a patent for the invention. The observations of *Alderson, J.*, to the jury on trying *Minter* v. *Wells* (1 W. P. C. 132) will throw light upon this point. 'Minter [the patentee] and Sutton [a workman employed by Minter] were together about the time the invention took place: which of the two suggested the invention, and which carried it into effect, is a question for you to decide. If Sutton suggested the principle to Minter, then he would be the inventor. If, on the other hand, Minter suggested the principle to Sutton, and Sutton was assisting him, then Minter would be the first and true inventor, and Sutton would be a machine, so to speak, which Minter uses for the purpose of enabling him to carry his original conception into effect. You will judge which is the more probable of the two. Minter makes out his *primâ*

[1] See the note on p. 51.

facie case; he is the person who takes out the patent. If Sutton has received a compensation, nothing would have been more simple and easy than that he should have taken out the patent, and still Minter might have had the same benefit to-day; and there is no apparent reason why Sutton should not have taken out the patent which Minter has taken out, unless they were both desirous to ruin the invention; for suppose two persons are engaged on an invention of this description, they know perfectly well between themselves who is the real inventor of it, and who is the workman to carry into effect the conception; but they would destroy the value of it to both if they did not take it out in the name of the right person.'

In *Bloxam* v. *Elsee* (1 Carp. Rep. 434) an action brought for an infringement of a patent for making paper in large sheets, it was objected that many of the improvements set out in the specification were invented, not by the patentees, but by Mr. Donkin, and without them the invention was useless. Mr. Donkin was called, and proved that he was employed by the patentees to bring the machine to perfection, was paid by them for so doing, and was acting as their servant. It was contended, in reply, that these were the patentees' inventions, and that Mr. Donkin was employed by them to carry their ideas into effect. This view of the case seems to have been that of the judge presiding at the trial, and that of the judges before whom the motion for a nonsuit was argued; for although the patent was declared invalid, it was on other grounds, nothing being said on this point.

In *Allen* v. *Rawson* (1 C. B. 551), a case where the validity of a patent for improvements in the manufacture of felted fabrics was contested on the ground that parts of the invention owed their origin to two workmen, it was held that more convenient modes of

carrying out the main principle of an invention and subordinate improvements suggested by persons in the employment of the patentee may be safely adopted by him and embodied in his specification. 'I take the law to be' (said *Mr. Justice Erle*, before whom the action for an infringement was tried), 'that if a person has discovered an improved principle, and employs engineers, agents or other persons to assist him in carrying out that principle, and they in the course of experiments arising from that employment make valuable discoveries accessory to the main principle, and tending to carry that out in a better manner, such improvements are the property of the inventor of the original improved principle, and may be embodied in his patent; and if so embodied the patent is not avoided by evidence that the agent or servant made the suggestions of the subordinate improvement of the primary and improved principle.' When a new trial was moved for, on the ground that the judge had misdirected the jury, it was refused. On that occasion *Tindal, C. J.*, said, 'It would be difficult to define how far the suggestions of a workman employed in the construction of a machine are to be considered as distinct inventions by him, so as to avoid a patent incorporating them taken out by his employer. Each case must depend upon its own merits. But when we see that the principle and object of an invention are complete without it, I think it is too much that a suggestion of a workman employed in the course of the experiments, of something calculated more easily to carry into effect the conceptions of the inventor, should render the patent void.'

This is a very different case, however, from that where the patentee has no closer connection with the invention than that of being simply the employer of the inventor. Thus, in Arkwright's case, it appeared that Arkwright, the patentee, had been told of a par-

ticular roller, part of the machinery by Kay, and that, perceiving the value of the invention, he took Kay into his service for two years, during which time he employed him to make models, and subsequently claimed the invention as his own, making it the foundation of a patent. Arkwright adopted in the same way a crank invented by Hargrave. In the face of this evidence, Arkwright's claim to be the first and true inventor fell to the ground. (*Rex* v. *Arkwright*, Dav. P. C. 61 ; 1 W. P. C. 64.) Again, in the case of *Barker* v. *Shaw* (1 W. P. C. 126 *n.*), an action for the infringement of a patent for an improvement in making hats, a witness proved that he had made the improvement whilst employed in the patentee's workshop, whereupon the plaintiff was nonsuited.

In these cases it was clear that the patentee was not the first and true inventor, since the source of the invention could be traced elsewhere. Whenever this can be done (with the exceptions previously mentioned [1]) the patent is invalid. It is so, as we have seen, although the real inventor should be in the service of the patentee; and, *à fortiori*, will it be so where there is still less connection between them. In Tennant's case it was proved that, before the grant of the patent, conversations had taken place between Tennant (the patentee) and a chemist, who had suggested to Tennant the basis of the patented improvement. This piece of evidence, in addition to slight evidence of user, induced the Court to nonsuit the plaintiff. (Dav. P. C. 429.)

PUBLICATION IN PRINTED BOOKS.

It has been repeatedly held that an inventor's claim to novelty is destroyed by showing the previous publication of the invention in some printed book in use in Great Britain. *Mr. Justice Buller*, in *Rex* v. *Ark-*

[1] See the note on page 51.

wright (1 W. P. C. 72), said, 'It is admitted that this is not a new discovery; for Emmerson's book was produced, which was printed a third time in the year 1773, and that is precisely the same as this.' 'Although' (said *Tindal, C. J.*, in *Cornish* v. *Keene*, 1 W. P. C. 507) 'it is proved that the invention is a new discovery, so far as the world is concerned, yet if anybody has been able to show that although that was new—that the party who got the patent was not the man whose ingenuity first discovered it, that he had borrowed it from A or B, or taken it from a book printed in England, and which was open to all the world—then it would become an important question whether he was the first and original inventor of it.' In the course of the argument of the case of *The Househill Company* v. *Neilson* (1 W. P. C. 673), an appeal from the Court of Session in Scotland to the House of Lords, *Lyndhurst, L. C.*, asked, 'If the machine is published in a book, distinctly and closely described, corresponding with the description in the specification of the patent, though it has never been actually worked, is not that an answer to the patent? It is continually the practice on trials for patents to read out of printed books, without reference to anything that has been done.' And *Lord Brougham* added, 'It negatives being the true and first inventor. It must not be a foreign book, but published in England' (1 W. P. C. 718).

The law, however, has since been interpreted somewhat differently from what is laid down in this last sentence. If the foreign book containing a description of an invention has been circulated in England (*Reg.* v. *Steiner*, Newton's Lond. Jour. vol. xl. p. 71), or even if only four copies of the foreign book are sent over to a bookseller in this country and by him exposed for sale, only one being actually sold to a public library (*Lang* v. *Gisborne*, 31 Beav. 133), a patent

subsequently obtained by an independent inventor is invalid.

It seems from *Heurteloup's Patent* (1 W. P. C. 553) to have been thought that the deposit of a foreign work in the British Museum, which work contained the specification of a French patent for an invention, in great part the same as that for which a patent had subsequently been obtained in England, was sufficient to vitiate the latter patent on the ground of want of novelty.

However, where the book relied upon as evidence of a disclosure before the date of his patent of the patentee's invention, a skate, was an American book containing a copy of a drawing of the skate attached to the patentee's American patent, and which book had been received by a librarian of the Patent Office Library in London about thirty-seven days before the date of the English patent without being entered either in the list of donations or in the catalogue of the library, and nothing more was known of it until another librarian found it many months afterwards on a shelf in a corridor leading to the public room, which corridor was open to the public, all this was held by *Jessel, M. R.*, and afterwards by the Court of Appeal, not to prove a publication sufficient to invalidate the patent. (*Plimpton* v. *Spiller*, L. R. 6 Ch. D. 412.)

It may be inferred from some of the preceding cases that when the validity of a patent is contested on the ground of the invention having been previously communicated to the world by a book, it is not necessary to show that the patentee derived his knowledge of the invention from such book. And it was expressly decided in *Stead* v. *Williams* (2 W. P. C. 142), that if the invention has been already made public by any description contained in a work, whether written or printed, which has been publicly circulated, in such case the

patentee is not the true and first inventor within the meaning of the statute, whether he has himself borrowed his invention from such publication or not; because the public cannot be precluded from the right of using such information as they were already possessed of at the time the patent was granted.

The application of this rule must depend upon the particular circumstances of each case. The existence of a single copy of the work in a depository where it had long been kept in a state of obscurity, would afford a very different inference from the production of an encyclopædia or other work in general circulation. The question will be, whether, upon the whole evidence, there has been such a publication as to make the description a part of the public stock of information. (See also *Plimpton* v. *Malcolmson*, L. R. 3 Ch. D. 531; *Plimpton* v. *Spiller*, L. R. 6 Ch. D. 412; *Von Heyden* v. *Neustadt*, 50 L. J. N. S. Ch. 126; *United Telephone Co.* v. *Harrison*, L. R. 21 Ch. D. 721.)

PUBLICATION IN THE SPECIFICATION UNDER A PRIOR PATENT.

The law as regards the publication of the invention in the specification under a prior patent, is precisely the same as that with reference to a publication in a printed book. The invention has been deprived of its requisite attribute of novelty if it has been described in a previous specification, whether the patent has or has not expired.[1] If, prior to his obtaining a patent, any part of that which is of the substance of the invention has been communicated to the public in the shape of a

[1] The operation of this Rule is now narrowed by Art. 4 of the International Convention, and by Sect. 103 of the Patent Act, 1883. Any person who has duly registered an application for a patent in any of the States of the Union enjoys a right of priority to a British patent for a period of seven months from the date of his foreign application, although the invention may have been meanwhile published or used in this country.

specification of any other patent, he cannot claim the benefit of his patent. (*Lord Ellenborough*, in *Huddart* v. *Grimshaw*, 1 W. P. C. 86.) In *Jones* v. *Berger* (1 W. P. C. 550) it had been alleged that the principle of the invention was not new, having been the subject of former patents, and contained in published books; whereupon *Maule, J.*, remarked, 'I think it is an objection to a patent, and not evidence simply of an objection, that there has been a previous patent and specification enrolled containing the invention.'

In the case of *Macnamara* v. *Hulse* (2 W. P. C. 128), an action for the infringement of a patent for a method of paving streets with blocks in the form of two solid rhombs placed one in front of the other, in opposite directions, so that each side of a block was bevelled both inwards and outwards; it was proved that the defendant used blocks, each consisting of a single solid rhomb, and then fastened two together by pins, so that two of the defendant's blocks thus fastened exactly resembled one of the plaintiff's blocks. This was the infringement complained of. The defendant, at the trial, put in the specification of an expired patent, obtained by one M'Arthy, for a pavement in which each block had two bevels inwards and two outwards on the same side. If M'Arthy's block were cut into two, it would make two blocks similar to the plaintiff's; if cut into four, it would make four blocks similar to the defendant's. Both judge and jury thought that, under the circumstances, the plaintiff's invention was destitute of novelty. The plaintiff asserted that the defendant had infringed his patent by cutting his block into two. The defendant showed that the plaintiff, in forming his block, had only cut M'Arthy's block into two. The plaintiff, in support of his own patent, was bound to contend that M'Arthy's invention and his

own were distinct; but then if he established that, it followed that his own and the defendant's were likewise distinct, in which case there was no infringement.

But if the prior inventor has not shown how the invention is to be practically carried out, and an independent inventor does this and fully explains the mode in which the result is obtainable, his patent will be held good. It will be considered that he has been the first to carry the invention to a useful result, although his patent was granted after another one by which a similar object was sought to be effected. In the case of *Betts* v. *Menzies* (10 H. L. C. 117) it was held that a general description in a prior specification or in a published book, even if suggesting information or involving some speculative theory pertinent to the invention in question, is not to be considered as anticipating, and therefore avoiding for want of novelty, a subsequent patent involving a practical invention productive of beneficial results, unless it is ascertained that the antecedent publication involves the same amount of practical and useful information. Betts's patent was for the production of a material capable of application to many useful purposes by combining thin sheets of lead and tin by means of pressure. It appeared that as far back as 1804 one Dobbs had patented a process for making a new material by combining lead and tin by pressure, but he did not with any precision define the relative thicknesses of the sheets of metal nor the degree of pressure to be applied, whereas Mr. Betts entered minutely into those points. Moreover, it was not shown that the earlier process had ever been carried into practice. Under these circumstances the House of Lords held that Betts's invention had not been anticipated. See also the observations of *Wood, V. C.*, in the subsequent case of *Betts* v. *De Vitre* (11 L. T. N. S.

445), in which the validity of the same patent was in question.

The antecedent description of an invention which will have the effect of depriving a subsequently patented invention of the attribute of novelty, must (according to *Westbury, L. C.*, in *Hills* v. *Evans*, 4 De G. F. & J. 288) 'be such that a person of ordinary knowledge of the subject would at once perceive, understand, and be able practically to apply the discovery, without the necessity of making further experiments and gaining further information, before the invention can be made useful. If something remains to be ascertained which is necessary for the useful application of the discovery, that affords sufficient room for another valid patent. . . . The information as to the alleged invention given by the prior publication must, for the purposes of practical utility, be equal to that given by the subsequent patent. The invention must be shown to have been before made known. Whatever, therefore, is essential to the invention must be read out of the prior publication. If specific details are necessary for the practical working and real utility of the alleged invention, they must be found substantially in the prior publication. Apparent generality, or a proposition not true to its full extent, will not prejudice a subsequent statement which is limited and accurate, and gives a specific rule of practical application. . . . Upon principle, therefore, I conclude that the prior knowledge of an invention to avoid a patent must be a knowledge equal to that required to be given by a patent, viz. such a knowledge as will enable the public to perceive the very discovery, and to carry the invention into practical use.'

According to *Brett, L. J.*, in *Otto* v. *Linford* (Court

of Appeal, 46 L. T. N.S. 35), the question to be considered is whether the prior specification, fairly read by a person conversant with such matters, would give a reasonably clear description of the later invention—that is, supposing it to relate to a machine, whether it would give a reasonably clear description of a machine that would effect what the machine of the later inventor effects. (See also *Von Heyden* v. *Neustadt*, 50 L. J. N. S. 126.)

'Even if there is identity of language in two specifications' (said *Lord Westbury*, in *Betts* v. *Menzies*, 10 H. L. C. 152), 'and (remembering that those specifications describe external objects) even if the language is *verbatim* the same, yet if there are terms of art found in the one specification, and also terms of art found in the other specification, it is impossible to predicate of the two with certainty that they describe the same identical external object, unless you ascertain that the terms of art used in the one have precisely the same signification, and denote the same external objects at the date of the one specification as they do at the date of the other.'

Where a provisional specification contained an incomplete description of a piece of mechanism which was omitted from the complete specification, and another patent was afterwards obtained for similar mechanism, the passage in the preceding patent was held not to be a prior publication of the subsequent invention so as to vitiate the second patent, because the description was not sufficient to enable a workman to make the object. (*Stoner* v. *Todd*, L. R. 4 Ch. D. 58.)

By the thirty-fifth section of the Patent Act of 1883 it is enacted that a patent granted to the true and first inventor shall not be invalidated by an application in fraud of him, or by provisional protection

obtained thereon, or by any use or publication of the invention subsequent to that fraudulent application during the period of provisional protection.

A patent is not rendered invalid by the fact that the invention includes the subject-matter of a patent previously obtained, and not yet expired, if the later patentee takes care to distinguish his invention from that described in the prior patent, and claims only what belongs to him (*Crane* v. *Price*, 1 W. P. C. 413; *Lister* v. *Leather*, 8 E. & B. 1004). Of course, the second patentee must obtain the first patentee's licence before working his own patent, or he will lay himself open to an action for an infringement as long as the earlier patent remains in force (*Cannington* v. *Nuttall* L. R. 5 H. L. 20); and, of course, there must be some amount of new invention in addition to the previous invention, otherwise there is nothing to afford a foundation for a patent.

The existence of a patent for a certain application of a given thing (which thing is not new) will not vitiate a subsequent patent for another application of the same thing, provided that the two applications are perfectly distinct, and that the second application is not in any way comprised in the specification under the first patent. One Vaucher took out a patent for an improvement in packing hydraulic and other machines by means of a lining of soft metal, whereby certain parts of the machines were rendered air-tight and water-tight. It was subsequently discovered by one Newton, that the same material, soft metal, could be usefully employed in diminishing the friction of machinery in rapid motion, and in preventing the generation of heat, by applying it to the surfaces in contact. It was held, in an action for an infringement of Vaucher's patent, that the two applications of soft metal were essentially different, and Newton's invention was not

wanting in novelty. (*Newton* v. *Vaucher*, 6 Exch. Rep. 859.)

Under a patent for the purification of gas, Mr. Croll claimed the use of oxides of iron, which expression was held to mean both hydrated and anhydrous oxides of iron. Hills afterwards obtained a patent for the use of anhydrous oxide of iron for the same purpose; but it was said, in an action which he brought for the infringement of his patent, that he had been anticipated by Croll. On his part it was argued that as it was a fact that some oxides would answer the object in view, and some would not, it became a subject for investigation and experiment to ascertain what oxides it would be proper to employ, and that when he had made the discovery he was entitled to a patent in respect of it. The Court of Exchequer held that this discovery might properly be the subject of a patent. (*Hills* v. *London Gas Light Company*, 5 H. and N. 312.)

Having discussed the effect on a patent of prior publication of the invention in printed books or specifications, it is now time to ascertain the meaning of the technical phrase

PUBLIC USER.

One of the first cases which the books contain was decided in 1798. Tennant brought an action for an infringement of a patent which he had obtained for a method of using calcareous earths instead of alkaline substances in bleaching. It was proved, on the one hand, that bleachers were generally ignorant of the patented bleaching liquor until after the date of the patent. On the other hand, it was proved that a certain bleacher had used the same method of preparing bleaching liquor for five or six years previously to the date of the patent; and that the method had been kept secret from all except his two partners, and two servants

employed in preparing the liquor. On this evidence the plaintiff was nonsuited, the previous user being held to render the patent invalid (Dav. P. C. 429; 1 W. P. C. 125).

The evidence given in *Lewis* v. *Marling*, to impugn the patentee's claim of novelty, was that several years previously a similar machine was in use at New York, and that a specification had been sent over in 1811 to a person residing at Leeds, who employed two engineers to manufacture a machine from it, which, however, was never finished. The specification was shown to several persons, but the machine was never brought into use. In 1816 a model of a machine for shearing from list to list, by means of a rotatory cutter, was brought over from America, and shown to two or three persons in the manufactory of the importer; but no machine was ever made from it, nor was it publicly known to exist. Moreover, one Coxon, many years previously, had made a machine to shear from list to list, and this was tried by a person called as a witness; but he did not think it answered, and soon discontinued the use of it. *Lord Tenterden* told the jury that if it could be shown that the patentee had seen the model or specification, that might rebut the claim of invention; but there was no evidence of that kind; and he left it to them to say whether the invention had been in public use and operation before the granting of the patent. They found that it had not; and on the motion for a new trial, the judges thought there was no reason to find fault with the verdict.

Losh's patent was for improvements in the wheels of railway carriages, and these improvements consisted in constructing the pieces composing the entire wheel of malleable iron, and then welding them together. It was contended by the defendant in the case of *Losh* v. *Hague* (1 W. P. C. 202) that the invention was not

new, inasmuch as one Paton had, previously to the date of Losh's patent, and under a patent of his own, specified a mode of constructing wheels of wrought iron, which differed little, if at all, from those patented by Losh; moreover, that although the first wheel made under Paton's patent was riveted, all Paton's other wheels, thirty pairs in number, were made with the circumference of the inner rim entirely of wrought iron, and then welded into one piece. 'The question you have to try,' said *Lord Abinger* to the jury, 'on the originality of Losh's invention, is not whether Paton's patent contains that perfect periphery that is required in this case, but whether wheels have been publicly made on this principle.' (The jury by their verdict found that wheels had been previously made on the same principle as Losh's wheels.) 'If,' continued his lordship, 'the wheels had been made and sold to any one individual, the public's not wanting them because there were no railways, their not being adapted to any particular use, which at that time was open to the public to apply them to, makes no difference. You have it in evidence that thirty pairs were made with a complete continuous circumference all round. If they were so made and sold, or used at all, though not for any purpose that then made them popular or desirable, still they were made with that particular advantage which is claimed by Losh's patent, namely, a periphery made of one continuous piece of wrought iron, as well as the spokes. But that is not all the evidence; there are two parties from Manchester. One Horsefall says that he remembers, nearly twenty-eight years ago, that there were three trucks, having each three wheels, and those wheels were made of wrought iron spokes in a wrought iron circumference, and there is one exhibited before you which was actually in use at that time; the other, Roberts, confirms that, and has stated

that they existed for many years, and that they have been used.'

In charging the jury assembled to try the action of *Cornish* v. *Keene* (1 W. P. C. 508), *Tindal, C. J.*, said that 'if the invention was at the time the letters patent were granted in any degree of general use; if it was known at all to the world publicly, and practised openly, so that any other person might have the means of acquiring the knowledge of it as well as the person who obtained the patent, then the letters patent are void. Now it will be a question for you to say whether, upon the evidence which you have heard, you are satisfied that the invention was or was not in public use and operation at the time the letters patent were granted. It is obvious that there are certain limits to that question; the bringing it within that precise description which I have just given, must depend upon the particular facts which are brought before a jury. A man may make experiments in his own closet for the purpose of improving any art or manufacture in public use; if he makes these experiments, and never communicates them to the world, and lays them by as forgotten things, another person who has made the same experiments, or has gone a little further, or is satisfied with the experiments, may take out a patent and protect himself in the sole making of the article for fourteen years; and it will be no answer to him to say that another person before him made the same experiments, and therefore that he was not the first discoverer of it, because there may be many discoverers starting at the same time, many rivals that may be running on the same road at the same time, and the first that comes to the Crown and takes out a patent, it not being generally known to the public, is the man who has the right to clothe himself with the authority of the patent and enjoy its benefits. That would be an extreme case on

one side; but if the evidence, when properly considered, classes itself under the description of experiment only, and unsuccessful experiment, that would be no answer to the validity of the patent. On the other hand, the use of an article may be so general as to be almost universal. In a case like that you can hardly suppose that any one would incur the expense and trouble of taking out a patent. That would be a case where all mankind would say, "You have no right to step in and take that which is in almost universal use, for that is, in fact, to create a monopoly to yourself in this article without either giving the benefit to the world of the new discovery, or the personal right to the value of the patent, to which you would be entitled from your ingenuity and from your application." Therefore it must be between these two limits that cases will range themselves in evidence; and it must be for a jury to say whether, supposing those points to be out of the question in any particular case, the evidence which has been brought before them convinces them that the subject of the patent was in public use and operation at that time, at the time when the patent itself was granted by the Crown. If it was in public use and operation, then the patent is a void patent, and amounts to a monopoly; if it was not, the patent stands good.'

The case of *Carpenter* v. *Smith* (1 W. P. C. 530) arose out of an alleged infringement of a patent for an improved lock. 'I think,' said *Lord Abinger* to the jury, 'that what is meant by "public use and exercise" is this: a man is entitled to a patent for a new invention, and if his invention is new and useful, he shall not be prejudiced by any other man having invented that before, and not made any use of it; because the mere speculations of ingenious men, which may be fruitful of a great variety of inventions, if they are not

brought into actual use, ought not to stand in the way of other men equally ingenious, who may afterwards make the same inventions and apply them. A great many patents have been taken out, for example, upon suggestions made in a celebrated work by the Marquis of Worcester, and many patents have been derived from hints and speculations by that ingenious author. But yet, as he never acted upon them, as he never brought out any machines whatsoever, those patents are good. So that the meaning of these words, "public use," is this: that a man shall not, by his own private invention, which he keeps locked up in his own breast, or in his own desk, and never communicates it, take away the right which another man has to a patent for the same invention. Now "public use" means this: that the use of it shall not be secret, but public. If a man invents a thing for his own use, whether he sells it or not,—if he invents a lock, and puts it on his own gate, and has used it for a dozen years, that is a public use of it. If it were otherwise, see what the consequence would be. If Mr. Davies has a lock which he directed to be made and put on his gate sixteen years ago at least; if that was not a public use which prevented a man from taking out a patent, any man might go and take a model of that lock, and get a patent for it. How can he be the inventor of it? Because, to obtain a patent, a man must be the inventor; and if it has been once in public use, that is, used in a public manner, not used by the public, yet if it has been used by half a dozen individuals, or one,[1] in a public manner, any man having

[1] 'If a person' (asked *Dallas, J.*, *Hill* v. *Thompson*, 1 W. P. C. 240) 'had done precisely all that is specified to be done in this specification, and had not communicated it to any one, could he be prohibited by the patent from doing that which he had done before, though known to no one but himself; or could it be considered as new, if practised by only one person, but not communicated to the world?' And *Tindal, C. J.*, in *Cornish* v. *Keene* (1 W. P. C. 511),

access to it, how can he be said to be the inventor, if by merely gaining access to that he takes out a patent? A man cannot be said to be the inventor of that which has been exposed to public view, and which he might have had access to if he had thought fit.' The same judge subsequently said, in the same case, 'If you are of opinion (not that they were generally adopted by the public and used by the public, for that, in my opinion, is a perfect fallacy) that the use of them is public, and the exercise of the invention was public, and not kept secret so that the public might have no benefit from it, then I think that part of the issue you ought to find for the defendant.' The learned judge summed up the evidence as to a public user in this way:—Twenty-six years ago Freer produced to Tilsley a model of a lock, and desired him to make six dozen like it, and afterwards a dozen and a half. Tilsley employed Walker to execute the order, and gave him the model. The locks were made, and Freer paid for them. 'Here you have an article manufactured by an English manufacturer, and sold; and in my opinion, if it was sold even for the assumed purpose of being sent to America, I cannot but think that that would be a destruction of the novelty of the plaintiff's invention. When a model is sent to a workman, who sells seven and a half dozen, and sells them for a certain price, I must say I think the invention was used and publicly exercised. There is no secrecy in the manufacture of them; it is not shut up in the closet of the workman who makes them, but the man who makes them gives directions to another workman; he sells them for his own profit.'

observed that 'if the defendants had shown that they practised it (*i.e.* the patented invention), and produced the same result in their factory before the time the patent was obtained, they cannot be prevented by the subsequent patent from going on with that which they have done.'

These observations of *Lord Abinger* were made at the trial of an action which terminated in favour of the defendant. On the motion for a new trial, on the ground of misdirection, the judges of the Court of Exchequer expressed themselves satisfied with his lordship's view of the law and refused a rule, *Alderson, B.*, saying that 'public use means a use in public, so as to come to the knowledge of others than the inventor, as contradistinguished from the use of it by himself in his chamber.'

At the trial of *Hancock* v. *Somervell* (Newton's L. J. vol. xxxix. p. 158), *Mr. Justice Williams* told the jury, that in order to rebut the patentee's claim of novelty, it was not necessary that the alleged invention should have been used by the public; it was sufficient if it were shown to have been in use in public, in contradistinction to secret use.

The point as to public use was again raised in an action for infringing a patent for paving streets with wooden blocks. It was shown that, some time before the date of the patent, the carriage way of the porch of Sir W. Worsley's dwelling-house in Yorkshire had been laid with blocks of wood, on a system apparently similar to the plaintiff's. *Cresswell, J.*, told the jury, that if they thought the plaintiff's method of constructing the wooden pavement was the same as that adopted at Sir W. Worsley's, the invention must be deemed to have been made public. It had been publicly used, and made known to all persons who went to the house, so far as ocular inspection could acquaint them with it. Whether it had been used by one or used by five, the learned judge thought made no difference. (*Stead* v. *Williams*, 2 W. P. C. 136.)

In another action for infringing the same patent brought against another defendant, it was proved that the pavement at Sir W. Worsley's was on a different

principle from the plaintiff's. *Purke, B.*, told the jury that if the mode of forming and laying the blocks at Sir W. Worsley's had been precisely similar to the plaintiff's, that would have been a sufficient user to destroy the plaintiff's patent, though put in practice in a spot to which the public had not free access. (*Stead* v. *Anderson*, 2 W. P. C. 149.)

A patent for an improved anchor was granted in 1838 to one Porter. On the trial of an action, brought by Porter's assignee, for an infringement, it was shown that in 1826 an anchor-smith had invented an anchor similar to Porter's, and had sold a few of that make to various shipowners for use in their ships. This was held such a public user as sufficed to invalidate the patent. (*Honiball* v. *Bloomer*, 2 W. P. C. 199.)

Hancock v. *Somervell* (reported in Newton's L. J., vol. xxxix. p. 158) is a case in which peculiar circumstances tending to show public user were adduced in evidence for the purpose of rebutting the claim to novelty, and it raised the interesting question whether publication in this country of an *article* made abroad, there having been no disclosure of the secret of making it, is equivalent to a publication of the *invention*, so as to render void a patent afterwards obtained in this country by another inventor for a similar invention. Hancock's patent was for improvements in the preparation of caoutchouc, and the invention consisted in combining sulphur with the caoutchouc, which rendered it elastic at all temperatures. The defendants imported from America shoes made of caoutchouc, which, when analysed, were found to contain sulphur along with oxide of lead and other ingredients. In an action for an infringement of the patent it was proved that previously to the date of the plaintiff's patent specimens of caoutchouc prepared by sulphur were sent to England by Goodyear, of New York, and were shown to Hancock,

but the secret of the manufacture was not communicated to him. Negotiations were commenced for the sale of the invention to Hancock, but never completed. It was stated in evidence that Goodyear's agent left specimens with Hancock, supposing that it would not be possible for him to discover the process by which it was prepared. However, Hancock made experiments, and discovered that sulphur endowed caoutchouc with the property of elasticity at all temperatures, and he then took out his patent. *Mr. Justice Williams* left it to the jury to say whether, supposing the shoes to have been manufactured in England, they could have been made without infringing the plaintiff's patent; and then he proceeded to make these remarks upon the novelty issues:—'The defendants do not deny that Hancock is to be considered the inventor, notwithstanding Goodyear had previously made the discovery, provided the invention had not been published or in use in this country before the date of the patent. The defence consists of this: not only had Goodyear discovered the invention first, but also that the invention had been substantially published, and was in use—not in secret use, but in public use before the date of the patent; that the material being in public use, the ready means of the invention were also necessarily before the public; because it is said the article presented in itself such means of knowledge to the public as to enable any one of ordinary competence to reproduce the article. If you should be of opinion that the material was in use before the date of the patent, then the question resolves itself into this: what is your opinion as to whether the publication of the material was substantially a publication of the invention? If you should find that the material was in public use, but that, notwithstanding, the invention remained still a matter to be discovered, in my opinion the plaintiff's case would not be affected

by the circumstance of the material being in public use. If, on the other hand, you should think not only that the material was in public use (and I should here say that I do not think it is necessary the use should be actual sale—if it were in public use it need not be sold; it would be sufficient, for instance, if it were in use, handing about the country for the purpose of attracting customers); if you should think, also, that the material being so in use, it was so palpable how you could make it, when you got the material, that substantially the disclosure of the material was a disclosure of the means of making it; if you do not think that, then I think the plaintiff's case is unaffected by the circumstance of the material being before the public in the way I have been describing.' The jury found a verdict for the plaintiff, and thus the foreign inventor lost the benefit of a very valuable invention by not taking the precaution to obtain a patent in this country before opening negotiations for the sale of the manufactured article.

On the trial of *Muntz* v. *Foster* (2 W. P. C. 103–108), *Tindal, C. J.*, said to the jury, 'I look upon the invention to consist in this, that Muntz has by an experiment ascertained that a certain mixture of the alloy of zinc with copper will have the effect of producing a better sheathing (for the bottom of ships) by reason and by means of its oxidating just in sufficient quantities—that is, not too much, so as to wear away and impair the sheathing and render the vessel unsafe, but enough, at the same time, to keep by its wearing the bottom of the vessel clean from those impurities which before attached to it. And if it was shown, as possibly it might be, that sheets had been made of metal before, in the same proportion which he had pointed out, and if this hidden virtue or quality had not been discovered or ascertained, and consequently the application never made, I cannot think the patent will fail on that

ground. . . . In my judgment it will not go far enough [to show that sheets of this particular alloy had been previously made], unless they can show there has been some application of them before to this very useful purpose. . . . I do not think that the circumstance of showing that the combination of these two materials in a metal plate will of itself destroy this patent, when no attention at the time was paid to the purpose for which this patent was taken out, and it was made merely in the ordinary course of melters of metals for the various and ordinary purposes of life. I do not think that the circumstances of showing, that in the long time that has passed before us in the different, and I may say infinitely varying, combinations that must have been made for the various purposes for which brass and other metal was manufactured for ordinary and common purposes of life—to call a workman to show that on some occasion or occasions he had combined them in those proportions for another and different purpose; it does not appear to me that such destroys the patent.'

The question of public user arose in the case of *Heath* v. *Smith* (2 W. P. C. 268). An action for the infringement of a patent under which the invention claimed was an improved method of making cast steel, by fusing carburet of manganese along with common iron or steel. It was proved at the trial that five manufacturers of steel had used substantially the process patented by the plaintiff before the date of his patent, not by way of experiment, but in the way of their trade, and to the extent of hundreds of tons. Two of the manufacturers had kept the process a secret. The other three had openly practised it; but it had not become generally known, and the trade was not made acquainted with it until the plaintiff took out his patent. It was held, after argument, by the Court of

Queen's Bench, that there had been a public use of the process, and that the patent was, therefore, invalid. One of the judges pointed out this consequence of an opposite decision, that a man who made a discovery would be obliged to take out a patent for it in order to free himself from liability to action in the event of another man making the same discovery and procuring a patent. The process adopted by the five manufacturers was to place iron, manganese, and carbon in a crucible. The application of heat, according to the scientific witnesses, made first a carburet of manganese, and then made that substance unite with the iron. Now the Court of Exchequer Chamber had previously held that this process was an infringement of the patent, the specification of which claimed 'the use of carburet of manganese in any process for the conversion of iron into cast steel;' for although the plaintiff only mentioned carburet as a well-known substance which he put into the crucible, his patent was held to cover every mode of operating whereby carburet of manganese, however formed, was made to act upon iron. The result by the two processes was identical. The process used by Smith, the defendant in this action, was similar to that of the five manufacturers. If it was the same as the plaintiff's, he had a good defence; for the process was not new, and the plaintiff's patent was invalid: if it was not the same as the plaintiff's, then there was no infringement.

Where the defendants at the trial of an action for the infringement of a patent for a method of manufacturing penholders, proved that they had made penholders according to the method which the plaintiff afterwards patented, and that such penholders had been placed in their warehouse for sale, though no sale was proved, *Jervis, C. J.*, the presiding judge, held that the plaintiff's invention was destitute of novelty. (*Mullins* v. *Hart*, 3 Car. & K. 297.)

It may here be stated that when previous public user of the invention is relied upon as ground of the invalidity of a patent, it is not necessary to show that such user continued up to the time of the patent being granted. Even if discontinued, the patent will be invalidated. (*The Househill Co.* v. *Neilson*, 1 W. P. C. 709, in the *House of Lords.*) Their lordships, however, in delivering judgment in this case, expressly left it an open question whether a patent for an invention would or would not stand, if a similar invention had formerly been in use but had ceased to be used long before the date of the patent, and the thing had been completely lost sight of until discovered again and patented.

The point whether prior *secret* user is sufficient to vitiate a patent has never been judicially decided; but we have a dictum of Mr. Justice Erle, uttered in the above case of *Heath* v. *Smith*: 'If one party only,' said that learned judge, 'had used the process, and had brought out the article for profit, and kept the method entirely secret, I am not prepared to say that then the patent would have been valid.'

PRIOR USER BY INVENTOR.

We now come to a series of cases which declare the law with regard to a user of the patented invention before the date of the patent—not by other persons than the patentee, but by the patentee himself. If such a user by the patentee be tantamount to a publication of the invention, then the patent is just as invalid as if the invention had been publicly exercised by others. What, then, is the kind of user which will have this fatal effect upon the patent privilege?

An inventor does not lose his right to a patent by keeping his invention to himself after its completion, provided there is no profitable user of it (*Bentley* v.

Fleming, 1 C. & K. 587). But it may be remarked that, although not destructive of his right, delay is here especially dangerous, and the fact might, under certain circumstances, be used as a strong argument against a patentee.

In *Bramah* v. *Hardcastle* (Holroyd, 81), which was an action for infringing a patent for a water-closet, it appeared that the patentee had made two or three of these machines before he obtained his patent; but it was admitted that this fact would not of itself invalidate the patent.

If, however, the article has been manufactured for sale, and offered for sale, although not sold, this will be such a user of the invention as will render a subsequently obtained patent bad. (*Oxley* v. *Holden*, 8 C. B. N. S. 666.)

But where delay occurs in the issue of a patent without the patentee's fault, the manufacture by the patentee of articles before the date of the patent for the purpose of being sold after the date, will not render the patent invalid. (*Betts* v. *Menzies*, 4 Jur. N. S. 477.)

In *Wood* v. *Zimmer* (Holt, N. P. C. 57) it appeared in evidence that a great quantity of verdigris made according to the patented process had been sold by the inventor in the course of four months before the patent was obtained, and *Gibbs*, *C. J.*, held that 'the public sale of that which is afterwards made the subject of a patent, though sold by the inventor only, makes the patent void.'

In *Morgan* v. *Seward* (1 W. P. C. 194), an action which arose out of Galloway's patent for an improved method of constructing paddle-wheels, it was given in evidence that before the date of the patent, Curtis, an English engineer, made for Morgan, the managing director of the Venice and Trieste Company, two pairs of wheels, upon the principle mentioned in the specifi-

cation. Galloway, the patentee, gave instructions to Curtis under an injunction of secrecy, because he was about to take out a patent. The wheels were completed and put together at Curtis's factory, but not shown or exposed to the view of those who might happen to come there. After remaining a short time, the wheels were taken to pieces, packed up in cases, and sent to Venice in April 1829. Curtis deposed that they were sold to the company, without saying by whom, and Morgan paid Curtis for them. Galloway obtained a patent on July 22, 1829, and it was assigned by him to Morgan. Upon these facts it was contended that the invention, at the date of the letters patent, was not new, in the legal sense of that word. *Parke, B.*, delivered the judgment of the Court of Exchequer, before whom the point was argued, in these words:—'The word "manufacture" in the statute must be construed in one of two ways: it may mean the machine when completed, or the mode of constructing the machine. If it mean the former, undoubtedly there has been no use of the machine, as a machine, in England, either by the patentee himself or any other person; nor, indeed, any use of the machine in a foreign country before the date of the patent. If the term "manufacture" be construed to mean "the mode of constructing the machine," there has been no use or exercise of it in England, in any sense which can be called "public." The wheels were constructed under the direction of the inventor, by an engineer and his servants, with an injunction of secrecy, on the express ground that the inventor was about to take out a patent, and that injunction was observed; and this makes the case, so far, the same as if they had been constructed by the inventor's own hands, in his own private workshop, and no third person had seen them whilst in progress. The operation, indeed, was disclosed to the plaintiff

Morgan; but there is sufficient evidence that Morgan at that time was connected with the inventor, and designing to take a share in the patent. A disclosure of the nature of the invention to such a person under such circumstances must surely be considered private and confidential. The only remaining circumstance is, that Morgan paid for the machines, with the privity of Galloway, on behalf of the steam company; but there was no proof that he paid more than the price of the machines, as for ordinary work of that description; and the jury would also be well warranted in finding that he did so with the intention that the machine should be used abroad only by this company, which, as it carried on its transactions in a foreign country, may be considered as a foreign company; and the question is, whether this solitary transaction, without any gain being proved to be derived thereby to the patentee or to the plaintiff, be a use or exercise in England of the mode of construction in any sense which can be deemed a use by others, or a public use, within the meaning of the statute and the patent. We think not. It must be admitted that if the patentee himself had, before his patent, constructed machines for sale, as an article of commerce, for gain to himself, and been in the practice of selling them publicly—that is, to any one of the public who would buy—the invention would not be new at the date of the patent. This was laid down in the case of *Wood* v. *Zimmer*, and appears to be founded on reason; for if the inventor could sell his invention, keeping the secret to himself, and when it was likely to be discovered by another, take out a patent, he might have practically a monopoly for a much longer period than fourteen years. Nor are we prepared to say that if such a sale was of articles that were only fit for a foreign market, or to be used abroad, it would make any difference; not that a single instance of such a sale,

as an article of commerce, to any one who chose to buy, might not be deemed the commencement of such a practice, and the public use of the invention, so as to defeat the patent. But we do not think that the patent is defeated on the ground of the want of novelty, and the previous public use or exercise of it, by a single instance of a transaction such as this, between the parties connected as Galloway and the plaintiff are, which is not like the case of a sale to any individual of the public who might wish to buy; in which it does not appear that the patentee has sold the article, or is to derive any profit from the construction of his machine, nor that Morgan himself is; and in which the pecuniary payment may be referred merely to an ordinary compensation for the labour and skill of the engineer actually employed in constructing the machine; and the transaction might, upon the evidence, be no more in effect than that Galloway's own servants had made the wheels; that Morgan had paid them for the labour, and afterwards sent the wheels to be used by his own co-partners abroad. To hold this to be what is usually called a publication of the invention in England, would be to defeat a patent by much slighter circumstances than have yet been permitted to have that effect.'

Adamson invented certain machinery whilst engaged in the execution of a contract for the erection of a pier. This machinery he used on the works for four months before he applied for a patent. It was held that there had been public user, inasmuch as he had derived a profit from the employment of the invention after its utility had been ascertained, and during all that time the public had free access to it, so that he was not entitled to a patent. (*Re Adamson's Patent*, 6 De G. M. & G. 420.)

It is clear from the preceding cases that an inventor, who intends to patent his invention, should be extremely

cautious how he deals with it before he applies for a patent. We may add that, although there may have been neither public user of the invention nor publication of it in a printed book or in a specification, yet if the facts justify the inference that a portion of the public had acquired a knowledge of the secret, a patent subsequently granted will be invalid. Thus one of three referees appointed under an Act of Parliament to inspect the works of gas companies in London, having made a discovery as to a process for purifying gas, whilst engaged in the performance of his duties as referee, took out a patent for it after the three referees had drawn up a report, in which the principle of the process was indicated, though before the report was submitted to the Board of Trade. It was held by the House of Lords (*Patterson* v. *The Gas Light and Coke Company*, L. R. 3 App. Ca. 239) that the contents of the report had become public property, and that the patent was invalid.

An inventor may, it seems, safely deposit a machine of his invention, for a reasonable time, in a room open to the public, for the purpose of having its properties tested. (*Bentley* v. *Fleming*, 1 C. & K. 587.)

Previously to the passing of the Patent Law Amendment Act, 1852, when separate patents for the three kingdoms of England, Scotland, and Ireland were issued to inventors, it was decided by the House of Lords, in the case of *Brown* v. *Annandale* (1 W. P. C. 433), affirming the decision of *Roebuck* v. *Stirling* (1 W. P. C. 45), that the public use of an invention in England, prior to the date of letters patent in Scotland, rendered such letters patent void, although the invention was new as regards Scotland.

It was decided, however, by *V. C. Bacon* in the case of *Rolls* v. *Isaacs* (L. R. 19 Ch. D. 268) that the prior user of an invention in a colony does not affect the

validity of a patent subsequently obtained for the same invention in the United Kingdom.

EXPERIMENTS.

It is well-settled law, that when the disclosure of the secret took place only during the course of experiments made with the view of testing or improving the invention (such disclosure being unavoidable and not more than was necessary for the purpose), this will not take away the inventor's right to a patent. Nor will the previous experiments of other persons have that effect, if such experiments did not result in the realisation of the discovery. Few patents, indeed, could be sustained if previous experiments, approaching the patented invention, were held to vitiate them. In almost every case experiments of some kind or other have been made in the same track, and many beneficial inventions have been but a step beyond what has before been reached by experiments which seemed fruitless, and were abandoned.

In *Galloway* v. *Bleadon* (1 W. P. C. 525), *Tindal, C. J.*, said, 'A mere experiment, or a mere course of experiments, for the purpose of producing a result which is not brought to its completion, but begins and ends in uncertain experiments, that is not such an invention as should prevent another person, who is more successful, or pursues with greater industry the chain in the line which has been laid out for him by the preceding inventor, from availing himself of it and having the benefit of it.' His lordship, with reference to the case before him, afterwards remarked, 'That there had been many experiments made upon the same line, and almost tending, if not entirely, to the same result, is clear from the testimony you have heard; and that these were experiments known to various persons. But if they rested on experiment only, and

had not attained the object for which the patent was taken out, mere experiment, afterwards supposed by the parties to be fruitless, and abandoned because they had not brought it to a complete result, that will not prevent a more successful competitor who may avail himself, so far as his predecessors have gone, of their discoveries, and add the last link of improvement in bringing it to perfection.' See also the observations of the same learned judge in *Cornish* v. *Keene* (1 W. P. C. 508).

In *Jones* v. *Pearce* (1 W. P. C. 124), an action brought for an infringement of a patent for an improved construction of carriage-wheels, it was contended, on behalf of the defendants, that the invention was not new, wheels similar in principle to those for which the patent had been obtained having been invented several years previously by a Mr. Strutt, made under his orders, and used in a cart employed on the public roads for upwards of a year. These wheels were afterwards laid by, the spokes having occasionally got bent. *Patteson, J.*, told the jury that if Strutt's wheel was, in substance, the same wheel as the patentee's, and if it had been 'used openly in public, so that everybody might see it, and had continued to use the same thing up to the time of taking out the patent,[1] undoubtedly, then, that would be a ground to say that the plaintiff's invention is not new. But if, on the other hand, you are of opinion that Mr. Strutt's was an experiment, and that he found it did not answer, and ceased to use it altogether, and abandoned it as useless, and nobody else followed it up, and that the plaintiff's invention, which came afterwards, was his own invention, and remedied the defects of Mr. Strutt's

[1] This part of the learned judge's charge cannot be considered law since the decision of the House of Lords in *The Househill Co.* v. *Neilson* (*ante*, p. 83). And see the remarks of *Sir W. P. Wood, V. C.*, on *Jones* v. *Pearce*, in *Tangye* v. *Stott* (14 W. R. 128).

wheel, then there is no reason for saying that the plaintiff's patent is not good.'

Before applying for a Patent the inventor of a machine entrusted it to a person for the purpose of trying experiments, and it was held that he had not thereby made it public. (*Bentley* v. *Fleming*, 1 Car. & K. 578.)

The question whether the evidence amounts to proof of public use, or whether it only proves that abandoned experiments had been made, is frequently of considerable delicacy; since, as it has been remarked from the Bench, a slight alteration in the effect of the evidence will establish either the one proposition or the other, and the only proper mode of deciding it is by leaving it to the jury. (*Cornish* v. *Keene*, 1 W. P. C. 519.)

On the trial of an action for infringing a patent for improvements in cards for carding fibrous substances, which improvements consisted in using caoutchouc as a substitute for leather as an elastic bed in which the teeth were fixed, it was given in evidence, in support of a plea denying the novelty of the invention, that a certain material, called Hancock's patent leather, had been made and sold previously to the patent; and it was suggested, rather than proved, that this material was substantially the same thing as the elastic bed in which the carding teeth were fixed. It appeared that the patent leather had been supplied to certain manufacturing firms, during the space of about a year and a half, several years before the date of the patent, and that it had been used in the construction of cards, but had not been employed for that purpose since that time. 'Supposing,' said *Cresswell, J.*, to the jury 'that the article (Hancock's patent leather) did embody the principle of the plaintiff, so as to present to persons using it the properties, qualities, and advan-

tages in principle of that article which the plaintiff makes, the question for you will be, whether that user is not to be considered rather in the nature of an experiment, than of any public use of the article, so as to deprive the plaintiff of the fruit of his discovery in respect of this manufacture.' (*Walton* v. *Bateman*, 1 W. P. C. 619.)

At the trial of *Stead* v. *Williams* (2 W. P. C. 135), *Cresswell, J.*, said to the jury, 'I take it that there is a great difference between the knowledge of an invention as a thing that would answer and was in use, and the knowledge of it as a mere experiment that had been found to be a failure, and thrown aside. If a person has had a scheme in his head and has carried it out, but after a trial has thrown it aside, and the thing is forgotten and gone by, then another person re-introducing it may, within the meaning of the Act, be the inventor and the first user of it, so as to justify a patent.'

In the case of *Tangye* v. *Stott* (W. N. 1866, p. 68), it appeared that the plaintiff was the assignee of a patent obtained for improvements in pulley blocks, and that previous to the patent there had been described in a book a pulley similar in principle to that patented, from which description one Moore had made a pulley. This he had tried a few times and then laid aside. The defendant had also made a pulley from the description in the book. It was held, however, that although the principle had been made known, the facts above mentioned were of the nature of experiments, and that as the patentee was the first to carry the invention fully into effect his patent was good.

Where a series of experiments performed in the presence of others is not only successful, but is actually of pecuniary benefit to the inventor, it will not necessarily be held that he has given the invention to the

world. That the coincidence of actual immediate profit with the carrying on of experiments is not of itself sufficient to render a subsequently obtained patent void, was decided in the case of *Newall* v. *Elliott* (4 C. B. N. S. 269), where it appeared that the inventor of a machine for paying out telegraph wire had not procured a patent until after he had laid down a cable in deep sea by means of the machine. Experiments on dry land had been indecisive; an opportunity for making decisive experiments was presented in the course of executing a Government contract for laying down a cable at sea. Such experiments were made, and the Court held that they did not amount to a gift of the invention to the world.

In *Hills* v. *London Gas Light Co.* (5 H. & N. 312) it appeared that one Croll had purified many thousand feet of gas by a mode for which Hills subsequently obtained a patent, and this gas was sold. The jury, on the trial of an action brought by Hills for the infringement of his patent, found that this was by way of experiment, and the Court refused to disturb the verdict. In delivering judgment on the defendants' rule for a new trial, the Court said, 'The word "experiment," in the cases referred to, has been used, not as the sole test upon a matter of this sort, but as indicating a class of practice, and for the purpose of showing that if there has been a user of an invention not of a substantial character, but in the character of an experiment, then, although the thing has been done before, it does not preclude a person from taking out a patent for it; so that although what Croll did may not have been strictly in the nature of an experiment, still the jury have so found it, and we cannot grant a new trial.'

Public Exhibitions.

If an inventor desires to exhibit at an industrial or international exhibition, an invention which he has not yet patented, but for which he intends to obtain a patent, he should proceed under the 39th section of the new Act, and Rule 17 of the Patents Rules, 1883. That section enacts that (1) the exhibition of an invention at an industrial or international exhibition certified as such by the Board of Trade, or (2) the publication of any description of the invention during the period of the holding of the exhibition, or (3) the use of the invention for the purpose of the exhibition in the place where the exhibition is held, or (4) the use of the invention during the period of the holding of the exhibition by any person elsewhere, without the privity or consent of the inventor, shall not prejudice the right of the inventor, or his legal personal representative, to apply for and obtain provisional protection and a patent in respect of the invention or the validity of any patent granted on the application. But the exhibitor must, before exhibiting the invention, give the Comptroller the notice prescribed by Rule 17 of his intention so to do; and the application for a patent must be made before or within six months from the date of the opening of the exhibition. The inventor must also furnish to the Comptroller a brief description of the invention with drawings, if necessary, and such other information as the Comptroller may require.

CHAPTER IV.

WHO MAY BE A PATENTEE.

By the fourth section of the Patent Act of 1883, any person, whether a British subject or not, is empowered to make application for a patent. Two or more persons may make a joint application and a patent may be granted to them jointly. By the fifth section of that Act, an application must contain a declaration to the effect that the applicant is in possession of an invention, whereof he, or in the case of a joint application, one or more of the applicants, claims or claim to be the true and first inventor or inventors.

No application will be entertained at the Patent Office, unless the person or persons claiming to be the true and first inventor or inventors are applicants, but other persons who are non-inventors may join in the application, and in that case the patent will be issued to all the applicants, who will be joint patentees. There is, however, no form enabling an inventor and an incorporated company to apply jointly for a patent.

For a long series of years the strict letter of the statute of James has been so far relaxed as to allow persons simply importing an invention from a foreign country into this realm to obtain a patent in respect of it, provided that such an invention is new and useful, the administrators of the law always reading the word 'inventor,' in the statute, as embracing an importer. The first decision on this point was in the case of *Edgeberry* v. *Stevens*, to be found in the

second volume of 'Salkeld's Reports,' p. 477, 'If the invention be new in England a patent may be granted, though the thing was practised beyond sea before; for the statute speaks of new manufactures within this realm; so that if it be new here, it is within the statute; for the Act intended to encourage new devices useful to the kingdom, and whether learned by travel or by study, it is the same thing.'

In *Carpenter* v. *Smith* (1 W. P. C. 535), *Lord Abinger* said, 'A man has a right to a patent, not only for his own original patent, but he has a right to a patent, if he is the first person who brings into England an invention which is used abroad and not known in England.'

Previous to the passing of the new Act it had been decided (*Chappell* v. *Purday*, 14 M. & W. 318) that an alien might be the grantee of a patent; and *in re Wirth's Patent* (L. R. 12 Ch. D. 303), that a patent might be granted to an alien resident abroad for an invention communicated to him by another alien also resident abroad, but the office rules now require the applicant to be resident (see p. 318.) In *Beard* v. *Egerton* (3 C. B. Rep. 97) it was held that the grant might be taken either in the alien's name or in the name of a British subject in trust for him. It has long been a common practice, which the new Act has not abrogated, to grant patents to British subjects resident in Great Britain in respect of inventions communicated from abroad. If the grantee is the agent of the foreign inventor, the letters patent are subsequently assigned to the latter or his nominee. But in these cases it is necessary for the applicant to state in his application that the subject matter was communicated to him from abroad. (*Milligan* v. *Marsh* 2 Jur. N. S. 1083.) See the form of application A 1 in the first schedule of the Patents Rules 1883.

By the International Convention and section 103 of the Patents Act, a foreign patentee has an absolute right of priority for his invention for a period of seven months from the date of his foreign application, notwithstanding any intermediate publication or use of the invention in this country meanwhile.

A British subject has never been permitted to obtain a patent for an invention derived from another British subject residing in the United Kingdom, and it seems doubtful whether a valid patent could be obtained in respect of an invention communicated by an alien permanently domiciled here.

No objection can be taken to a patent on the ground that one of the grantees is an infant. (*Cheavin* v. *Walker*, L. R. 5 Ch. D. 858.)

In consequence of the decision of the Court in *Marsden* v. *Saville Street Foundry Co.* (L. R. 3 Ex. D. 203), where it was held that the administrator of an inventor, who died before applying for a patent, was not entitled to a patent for the invention, although it was fully described in the papers of the deceased inventor, a clause (sect. 34) was introduced into the Patent Act of 1883, by which it was provided that if a person possessed of an invention dies without making application for a patent for the invention, application may be made by, and a patent for the invention granted to, his legal representative; but every such application must be made within six months of the decease of such person, and must contain a declaration by the legal representative that he believes such person to be or to have been the true and first inventor of the invention.

By the twelfth section of the same Act (sub-section 3 *b*) it is enacted that if the applicant for a patent dies before the expiration of fifteen months from the date of application (and before the patent shall have been sealed), the patent may be granted to his legal

representative, and sealed at any time within twelve months after the applicant's death.

In the event of an applicant dying before leaving a complete specification there is no express authority given by the Act to his legal representative to leave that instrument at the Patent Office, or for the Comptroller to accept it if left. It may perhaps be held that such authority is impliedly given by the section just referred to.

Persons occupying an official position may under certain circumstances be incapable of obtaining a patent for inventions connected with the subject-matter of their official business. Thus, Patterson, one of the three gas referees appointed by the Board of Trade under the City of London Gas Act of 1868, procured a patent for an improved mode of purifying coal gas on March 9, 1872. It was stated that he had obtained a knowledge of the patented process in the course of his labours as referee, and it appeared that the alleged invention had been described by the three referees, including Patterson, in an official report, which though dated January 31, 1872, and printed about that time, was kept back from the authorities to whom it ought to have been presented as soon as printed, until March 26. A suit for an infringement of the patent having been decided in Patterson's favour, the case went before the Court of Appeal (*Patterson* v. *Gas Light and Coke Company*, L. R. 2 Ch. D. 812), and then to the House of Lords (L. R. 3 App. Cas. 239), where it was held that the knowledge obtained in the discharge of his duty by one referee, and by him communicated to his colleagues, became at once public property, and could not be treated by them as confidential, nor could one of their number take out a patent for it.

CHAPTER V.

THE TITLE.

THE proceedings on the application for a patent[1] commence with the preparation of a declaration, to the effect that the applicant is in possession of an invention whereof he, or in the case of a joint application one or more of the applicants, claims or claim to be the true and first inventor or inventors. The form of the declaration, which must bear the stamp of 1*l.*, is set forth in the second schedule to the Patents Rules, 1883. It must be made before a justice of the peace, or a person authorised to administer oaths in any court in the United Kingdom. When left at the Patent Office it must be accompanied by either a provisional or complete specification, and that specification must in either case commence with the title (Patents Act 1883, sect. 5). The application and specification are then referred by the comptroller to an examiner, part of whose duty is to ascertain and report whether the title sufficiently indicates the subject-matter of the invention (sect. 6); and if he reports that the title does not sufficiently indicate the subject-matter of the invention, the comptroller may require it to be amended (sect. 7).

[1] Stamped forms of application have been placed on sale at the chief post-offices of the United Kingdom. Applications, as well as any other document, notice, &c., required to be left at the Patent Office, may be sent in a prepaid letter through the post. See section 97 of the new Act, and Rule 19 of the Patents Rules, 1883.

The procedure on applications is regulated by Rules 8, 9, 10, 21 27, 28, and 29.

The title is the short statement by which the inventor sets forth in very general terms the object of the invention; and this being repeated in the body of the declaration, and finally transferred into the patent, is styled the Title of the Patent. Thus he may apply for a patent in respect of 'Improvements in locomotive steam engines,' or for 'A new or improved sewing machine,' or for 'Improved methods of purifying illuminating gas.' The words here placed between marks of quotation would be the titles of the respective patents.

At a time when a provisional specification was not required to be lodged with the petition, and when consequently the title could not be officially compared with a description of the invention, it not unfrequently happened that the title was incorrect, and patents were sometimes lost from want of care in this particular. For if the title was too comprehensive—that is, if it extended to matters not included in the invention, the patent was bad. If, on the other hand, it was too narrow, besides excluding by its very terms something which the inventor might have secured, the patent would likewise be held bad in case the specification went beyond the title.

But now, since the title is accompanied by an outline or full description of the invention, in the shape of a provisional or complete specification, and the papers are submitted to an official examination, any false step that the inventor may make in regard to the title will probably be detected, and can be rectified. This, however, will involve delay and trouble, and the inventor will do well to take some pains to frame an unobjectionable title at first.

It is advisable to disclose the invention in as general terms as may be allowed, lest other persons who were about to specify should obtain a clue to it,

and frame their specification so as to deprive the real inventor of the priority and the reward which are his right. Instances of the nature referred to have not been, it is true, of common occurrence; but they have occurred, and it is desirable that an inventor should be cautious as to the language he uses.

In framing the title the inventor must carefully avoid the use of language which will lay it open to the charges of being 'too large, uncertain, inapplicable, inexplicable, inconsistent, vague, ambiguous, and at variance with the specification'—charges which it appears from a reported case were once heaped upon an unfortunate title relating to the simple matter of paving with wood.

With the view of showing the inventor who is engaged in preparing his application for a patent what are the principal errors to be avoided in framing the title, the following cases have been selected from those decided by the courts.

If the title bears evidence upon its face of an intention to deceive the public as to the subject-matter of the invention, this is a point which may be urged before a jury with fatal effect, for their opinion may be taken as to the existence of such an intention. (*Cook* v. *Pearce* 8 Q. B. 1044.)

The title of the invention spoke of a *tapering* brush; the specification disclosed the invention of a brush in which the bristles were of an unequal length, but there was no tapering to a point. The patent was held bad. (*Rex* v. *Metcalf*, 2 Stark. R. 249.)

The title was 'Certain improvements in the flageolet, whereby the fingering will be rendered more easy, and notes produced that were never before produced.' It appeared that only one new note was produced by the improved instrument, and this was held to

be a fatal objection. (*Bainbridge* v. *Wigley*, Parl. Rep. 197.)

The title was 'A new and improved method of drying and preparing malt;' but the invention specified was a process of producing a colouring matter for beer, by submitting malt, prepared in the ordinary manner, to a high temperature. This patent was likewise held bad. (*Rex* v. *Wheeler*, 2 B. & Ald. 345.)

A patent was obtained for an improved method of lighting cities, towns, and villages; but it appeared that the invention consisted in the improvement of an old street lamp. The title was held too general in its terms, and the patent could not be supported. (*Cochrane* v. *Smethurst*, 1 Stark. 205.)

Another patent held bad, by reason of having too general a title, was that contested in the case of *Campion* v. *Benyon* (1 Carp. Rep. 418). The patent was for 'A new and improved method of making double canvas and sailcloth with hemp and flax, or either of them, without any starch whatever;' but it appeared that double sailcloth had been made without starch before the patent, and the invention proved really to be a new method of preparing hemp and flax, with a view to its being woven into canvas and sailcloth.

The title of Felton's patent described the invention as a machine for giving an edge to knives, razors, scissors, and other cutting instruments; but the invention appeared, from the specification, not to be applicable to scissors, and the patent was adjudged to be void. (*Felton* v. *Greaves*, 3 C & P. 611.)

In *Newall* v. *Elliott* (10 Jur. N. S. 955; *S. C.* 13, W. R. 11), *Pollock, C. B.*, stated that, when Attorney-General, he had refused an application for a patent for 'An improvement in locomotion,' such a title being too general.

On the other hand, the titles in the following cases

were held sufficiently certain: 'Improvements in the manufacture of plated articles,' when there was only a single improvement (*Nickels* v. *Haslam*, 8 Scott, N. R. 97). 'A *new or improved* method of obtaining the reproduction of all the images received in the focus of the camera obscura,' leaving it a matter of doubt whether the method was altogether a new one, or only an improvement (*Beard* v. *Egerton*, 3 C. B. 97). A process for more distinctly showing the finer lines of an engraving by means of a glazed surface on the paper designed to receive the impression, was held sufficiently described by the words 'Certain improvements in copper and other plate printing' (*Sturtz* v. *De la Rue*, 5 Russ. 322). Title, 'Improvements in Carriages:' the specification described improvements in adapting German shutters to carriages. But as such shutters can only be applied to covered carriages, and the title spoke generally of carriages, it was contended that it was too large. After argument, it was held a sufficiently accurate title; *Tindal, C. J.*, observing that it would endanger the validity of very many patents which have hitherto been free from exception, if the mere fact that their titles were given in such terms as to be capable of comprising other inventions besides that contained in the specification were sufficient to avoid them, in the absence of any proof of intention to commit a fraud on the Crown, or to deceive or mislead the public. (*Cook* v. *Pearce*, 8 Q. B. 1044.)

A patent was obtained for 'Improvements in machinery for the manufacture of bobbin net lace.' It was objected that the invention really was only for making a spot during a particular part of the process, and was useless where that addition was not wanted. The court, however, overruled the objection. (*Fisher* v. *Dewick*, 1 W. P. C. 264.)

The title and specification must be read together; and if the former should be ambiguous, the latter may explain it. Thus the title of Neilson's patent was an invention 'for the improved application of air to produce heat in furnaces where bellows or other blowing apparatus are required.' The invention disclosed by the specification was the introduction into the furnace of air heated between the blowing apparatus and the furnace; and it was held that this answered sufficiently well to the title. (*Neilson* v. *Harford*, 1 W. P. C. 312, 373.)

CHAPTER VI.

THE PROVISIONAL SPECIFICATION.

THE fifth section of the Patent Act of 1883 directs that the application [1] for a patent must be accompanied by either a provisional or complete specification. The latter instrument is the subject of the next chapter; it is to the former that we now draw the reader's attention. According to the third subsection of the same section, a provisional specification must describe the nature of the invention, and be accompanied by drawings if required; whilst by the fifth subsection it is directed that it must commence with the title. It ought not to comprise more than one invention (sect. 33), and the Comptroller may refuse to accept it if it does comprise more. The applicant, however, is authorised by Rule 23 of the Patents Rules, 1883, to amend the application so as to make it apply to one invention only; and he can then make application, if he thinks proper, for separate patents for the other inventions. In that case every such application will be dated as of the date of the first application, as if originally made on that date. Then by the sixth section the Comptroller is directed to refer every application to an examiner who is to ascertain and report to him whether the nature of the invention has been fairly described, and the applica-

[1] The form of the application is given as already stated in the second schedule to the Patents Rules, 1883, Form A. In case of an application on a communication from abroad Form A 1 must be used. See Rule 27. As to the procedure the reader is referred to the note on p. 97.

tion, specification and drawings (if any) have been prepared in the prescribed manner. If the examiner reports (sect. 7) that the nature of the invention is not fairly described, or that the application, specification, or drawings has not or have not been prepared in the prescribed manner, the Comptroller may require that the application, specification, or drawings be amended before he proceeds with the application. Where the Comptroller requires an amendment, the applicant may appeal from his decision to the law officer, who will, if required, hear the applicant and the Comptroller, and may make an order determining whether and subject to what conditions, if any, the application shall be accepted. When an application has been accepted, the Comptroller will give notice thereof to the applicant, and by Rule 25 of the Patents Rules, 1883, he will advertise such acceptance in the official journal of the Patent Office. The provisional specification will not, however, be open to the inspection of the public.

When the legal representative of a deceased inventor intends to apply for a patent, under the authority of the 34th section of the Patent Act of 1883, the application must be made within six months of the decease, and it must contain a declaration by the legal representative that he believes the person whom he represents to have been the true and first inventor of the invention. An official copy of or extract from the will or letters of administration must accompany the application in proof of the applicant's title. (Rule 24.)

A general description of the invention, fairly showing its real nature, is sufficient for the provisional specification. Minute details as to the manner of carrying out the invention need not be given.

It will be seen hereafter that it is not allowable to

vary the invention in any material respect, or to introduce matter into the complete specification which is not to be found in outline in the provisional; and the chief object of the provisional specification is to afford means for securing the identity of the invention as described at the time of application and when finally specified.

The provisional specification is not intended to ascertain the *entirety* but the *identity* of the invention, said *Pollock, C. B.*, in *Newall* v. *Elliott*, 1 H. & C. 797. And see also *Foxwell* v. *Bostock*, 4 De G. J. & S. 298. But these cases ought to be considered with reference to the later cases of *Penn* v. *Bibby* (L. R. 2 Ch. D. 127), *Bailey* v. *Roberton* (L. R. 3 App. Cas. 1055), *United Telephone Company* v. *Harrison* (L. R. 21 Ch. D. 746), which show that if the claims of the complete specification are not comprehended within the terms of the provisional specification, the patent will be invalid.

A provisional specification (said *Jessel, M. R.*, in *Stoner* v. *Todd*, L. R. 4 Ch. D. 58) is not intended to contain a complete description of the thing so as to enable any workman of ordinary skill to make it, but only to disclose the invention—fairly, no doubt, but in its rough state, until the inventor can perfect its details.

'The office of the provisional specification' (said *Lord Chelmsford*, in *Penn* v. *Bibby*, L. R. 2 Ch. 127) 'is to describe the nature of the invention, not with minute particularity, but with sufficient precision and accuracy to inform the law officer what is to be the subject-matter of the patent. It is not at all necessary that the provisional specification should describe the mode or modes in which the invention is to be worked or carried out.'

When an inventor is engaged in preparing his provisional specification, he ought, therefore, to keep in mind that every part of the invention, excepting details,

intended to be claimed by the complete specification must be foreshadowed in the preliminary instrument.

By the fifth and sixth subsections of the seventh section of the new Act it is provided that if after an application has been made, but before a patent has been sealed, another application is made, accompanied by a specification bearing the same or a similar title, it shall be the duty of the examiner to report to the Comptroller whether the second specification appears to him to comprise the same invention as that first specified; and if he reports in the affirmative, the Comptroller will give notice to the applicants that he has so reported. Where the examiner reports in the affirmative, the Comptroller may determine, subject to an appeal to the law officer, whether the invention comprised in both applications is the same, and if so, he is empowered to refuse to seal a patent on the application of the second applicant.

By this provision an important change in the procedure was effected, as there had been previously no means of ascertaining whether an application conflicted with a prior unspecified patent or not. Under Rule 12 of the Patents Rules 1883 the second applicant must within a limited time notify to the Comptroller whether or not he intends to be heard upon the matter; and he may be required (Rule 13) to submit a statement in writing, or to attend before the Comptroller to make oral explanations. Under Rule 16 both the prior and second applicants may attend the hearing before the Comptroller, but neither will be at liberty to inspect the specification of the other. The report of the examiner will, in case of appeal from the Comptroller's decision, but not otherwise, be accessible to the second applicant (sect. 9, subsect. 5).

It sometimes happens that, after a provisional specification has been lodged, an inventor thinks it desirable

to abandon it, and lodge another in a different form. Under the old law it was at one time doubted whether a patent obtained upon the latter provisional specification was valid, but in the case of *Oxley* v. *Holden* (8 C. B. N. S. 666) it was held that a provisional specification did not become public by the mere fact of abandonment. It did not become public until published by the Patent Office. There appears to be nothing in the Act of 1883 to prevent an applicant from abandoning his first application, and lodging a new one before filing complete specification, and within nine months from the day of the first application.

In *Stoner* v. *Todd* (L. R. 4 Ch. D. 58) it was held that a patent was not invalidated by the fact that it was obtained for an invention which had been incompletely described in a prior provisional specification.

By the fourteenth section of the Patent Act of 1883, where an application for a patent in respect of an invention has been accepted, the invention may during the period between the date of the application and the date of sealing such patent be used and published without prejudice to the patent to be granted for the same; and such protection from the consequences of use and publication is termed provisional protection.

This protection, however, gives the applicant no rights against the public. He is only protected against the consequences of his own publication in case of his employing workmen, making experiments, or exercising the invention (*Ex parte Bates & Redgate*, L. R. 4 Ch. 577); that is to say, he will not thereby prejudice the patent afterwards granted to him. He must not forget, however, that as he cannot take any legal proceedings for infringements committed before the publication of the complete specification (sect. 13), his proceedings even under protection should be conducted with due caution.

Seeing that it was held by *Lord Cranworth, C.*, in *Mathers* v. *Green* (L. R. 1 Ch. App. 29), that each of two joint patentees may use the invention without being liable to account to the other (joint patentees not being partners), it is desirable that joint applicants should consider their relative positions and come to an arrangement in good time as to the future working of the invention.

CHAPTER VII.

THE COMPLETE SPECIFICATION.

WHETHER there ever existed an implied compact between a patentee and the public with regard to a disclosure of the invention, as many lawyers formerly supposed and some doubted, is a question which it is unnecessary to discuss in these pages. It is sufficient for all practical purposes to say that the Patent Act of 1852 imposed upon every patentee the duty of particularly describing and ascertaining the nature of the invention, and in what manner it was to be performed; and that the Patent Act of 1883 has laid upon every applicant a like obligation in identical language (sect. 5, subs. 4). The instrument by which the applicant undertakes to satisfy the requirements of the law is known as the Complete Specification. It is by this instrument that the public are made acquainted with the inventor's secret, and he is bound to describe it clearly and fully, with the view of enabling others, when the proper time comes, to work the invention if they desire to do so. In the meantime the public are entitled to know what it is they are prohibited from using, that they may not unawares incur liability.

The reader will perceive before he arrives at the end of this chapter that the security of a patentee's privileges largely depends upon the shape given to this instrument. It is therefore necessary that he should exercise the greatest care and circumspection in its preparation.

As Sir George Jessel, then Master of the Rolls, once remarked in court, 'it is very difficult to draw a complete specification.' It may be conceived that, after the document has passed the ordeal of official examination, no further question can arise as to its sufficiency. An inventor, however, should not place too great reliance upon this, but should adopt every means in his power to make not only the complete but the provisional specification perfectly correct, and in accordance with both the letter and the spirit of the law, that they may, if at any time disputed, be held good upon their own merits.

After an account of the procedure has been given the greater part of this chapter will be devoted to a statement of the rules by which the inventor should be guided in preparing this important instrument. These rules will make him acquainted with the chief requirements of the law, and put him on his guard as to the faults which he is most likely to commit. Our remarks will be supported throughout by references to the reported cases.

PROCEDURE.

We have seen in the last chapter that, by the fifth section of the Patent Act of 1883, an application for a patent must be accompanied by either a provisional or a complete specification. Under the Act of 1852 the applicant had a similar liberty as regards the form of his specification. But it has never been a common practice to lodge a complete specification in the first instance, omitting the provisional specification altogether, because an inventor in the great majority of cases needs further time for making experiments and testing the invention with a view to its improvement and the working out of details, all which may be safely done under the protection of a provisional specification.

If he lodges the complete instrument at the time of application, he deprives himself of the opportunity of improving the invention, and of adding, perhaps greatly, to its value. Moreover, inventors who wish to obtain patents in other countries should bear in mind that the previous publication of an invention by a complete specification in this country may be a bar to a valid patent unless the case is one that falls within the operation of the fourth Article of the International Convention as to Patents.

The complete specification, whether left on application or subsequently, must, in the words of the Act, 'particularly describe and ascertain the nature of the invention, and in what manner it is to be performed, and must be accompanied by drawings if required.'[1] It must commence with the title, and must end with a distinct statement of the invention claimed. The form of the instrument is given in the second schedule of the Patents Rules 1883.[2] If left with the application (sect. 6), the papers are referred by the Comptroller to an examiner, whose duty it is to ascertain and report to the Comptroller whether the nature of the invention has been fairly described, and whether the application, specification, and drawings (if any) have been prepared in the prescribed manner, and the title sufficiently indicates the subject-matter of the invention. If the examiner reports in the negative, the Comptroller may require the application, specification, or drawings, to be amended before he proceeds with the application,

[1] The drawings accompanying the specification must comply with the regulations prescribed by Rules 28, 29, and 30 of the Patents Rules 1883. Rule 31 imposes on the applicant the duty of furnishing a drawing illustrating the novel features of the invention and an explanatory statement for insertion in the Journal issued by the Patent Office, but it is now understood that the explanatory statement will not be insisted upon.

[2] A fee of 4*l.* is payable on filing a complete specification with the application: if filed afterwards the fee is 3*l.*

subject to appeal to the law officer, who, after hearing the applicant and the Comptroller, may make an order determining whether and subject to what condition, if any, the application shall be accepted. When an application has been accepted, the Comptroller will give notice thereof to the applicant.

If the applicant (sect. 8) does not leave a complete specification with his application, he may leave it at any subsequent time within nine months from the date of application,[1] and unless it is left within that time the application will be deemed to be abandoned. The nine months will expire on that day of the ninth month which corresponds to the day of the application. Where a complete specification is left after a provisional specification the comptroller will refer both to an examiner, for the purpose of ascertaining whether the complete specification has been prepared in the prescribed manner, and whether the invention particularly described in the complete specification is substantially the same as that described in the provisional. If the examiner reports that these conditions have not been complied with, the Comptroller may refuse to accept the complete specification unless and until the same shall have been amended to his satisfaction; but such refusal is subject to appeal to the law officer, who, if required, will hear the applicant and the Comptroller, and may make an order determining whether and subject to what conditions the complete specification shall be accepted (subsect. 3).

It has been previously stated that the applicant is allowed nine months from the date of his application

[1] Whenever the last day for leaving a document at the Patent Office shall happen to fall on Christmas day, Good Friday, or on a Saturday or Sunday or on a day, observed as a holiday at the Bank of England, or on any day observed as a public fast or thanksgiving, the document may be left on the day next following any of these days (sect. 98)

for lodging his complete specification, but as a patentee cannot recover damages in respect of infringements committed before the publication of that instrument (sect. 13 of the new Act) it is desirable in most cases to file it with as little delay as possible.

Unless a complete specification is accepted within twelve months from the date of application, then (save in the case of an appeal having been lodged against the refusal to accept) the application will become void at the expiration of that time (subsect. 4).

In the event of the applicant's death before leaving a complete specification, no power is expressly given by the Act to his legal representatives to leave a specification at the Patent Office, or to the Comptroller to accept it if left. But perhaps it may be held that such powers are impliedly given by sub-section (3 *b*) of the twelfth section of the new Act.

On the acceptance of the complete specification the Comptroller will give notice thereof to the applicant and will advertise the acceptance in the official journal, and the application and specification or specifications, with the drawings, if any, will then be open to public inspection (sect. 10, and Rules 25 and 26).

After the acceptance of a complete specification and until the date of sealing a patent in respect thereof, or the expiration of the time for sealing, the applicant shall have the like privileges and rights as if a patent for the invention had been sealed on the date of the acceptance of the complete specification: Provided that an applicant shall not be entitled to institute any proceeding for infringement unless and until a patent for the invention has been granted to him (sect. 15).

It was decided in *Ex parte Henry* (L. R. S. Ch. 167) that a second applicant who had filed a complete specification along with his petition under the ninth section of the Patent Act of 1852, and had thereby

become entitled for six months to 'the like powers rights, and privileges, as might have been conferred on him by letters patent duly sealed, as of the date of the application,' did not acquire the rights of a patentee so as to prevent a person who had previously applied for a patent for a similar invention from obtaining a patent.

It is directed by section 9, subsection 5, that the reports of examiners shall not in any case be published or be open to public inspection, and shall not be liable to production or inspection in any legal proceeding, other than an appeal to the law officer under this Act, unless the court or officer having power to order discovery in such legal proceeding shall certify that such production or inspection is desirable in the interests of justice, and ought to be allowed.

In case of clerical errors in a specification they could only be amended formerly by order of the Master of the Rolls. (*Johnson's Patent*, L. R. 5 Ch. D. 503, and the cases there cited.) This jurisdiction still subsists (*Re Gare's Patent*, April 5, 1884). In *Dixon's Patent* (January 15, 1881) the M.R. required from the applicant an undertaking not to take proceedings for infringements committed before the date of the amending order. But now, by Sect. 18 of the Act of 1883, such errors may be amended, after the patent has been granted, by the Comptroller on such terms as he may think fit. Before the issue of the patent, clerical errors in or in connection with the application may be corrected by him under the 91st section of the new Act.

Any person has the right of opposing the grant of a patent on certain prescribed grounds, and the reader is referred for information on this subject to Chapter VIII.

DRAWINGS.

The Patent Act of 1883 (sect. 5, subsect. 4) directs that a complete specification must be accompanied by drawings if required.[1] Those who are called upon to interpret the instrument will look both at the words and the drawings, with the view of making them explain each other, and of arriving at the patentee's meaning (*Abbott, C.J.*, in *Bloxam* v. *Elsee*, 1 C. & P. 564). Many inventions can be explained perfectly well without any drawings; but wherever machines are the subject of or connected with the invention, drawings should always accompany the specification, for in such a case the relation of the parts will be clear at once through a visual representation, when a verbal description might be utterly unintelligible. Care must be taken that the patentee does not bind himself to the particular form given in the drawing, when he does not so intend. It may be that only a particular form is required to be secured, because no other form will effect the proposed result. In such a case, if the form is not copied, the invention is not made use of. But in most cases it is more than one form which is sought to be protected by patent, and the form given in the drawing is only to be taken as an illustration. This fact ought to be distinctly shown in the specification.

In *Arnold* v. *Bradbury* (L. R. 6 Ch. 706) it was contended by the defendants in a suit for restraining the infringement of a patent for an improved ruffle, and the machinery for making the same, that the

[1] Rules 28–30 of the Patents Rules, 1883, contain regulations as to the sizes and methods of preparing the drawings accompanying the provisional or complete specifications. Rule 31 directs the applicant to furnish an additional drawing illustrative of the features of novelty constituting the invention, for insertion in the Illustrated Journal of the Patent Office.

patentee had not described the mode in which the ruffle was made; but *Lord Hatherley, C.*, held that as the machine was very simple, and as the drawing showed how it was worked, that was sufficient. (See also *Hastings* v. *Brown*, 1 E. & B. 454; *Morton* v. *Middleton*, 1 Cr. S. 3rd Ser. 722; *Daw* v. *Eley*, L. R. 3 Eq. 500 *n.*, 14 W. R. 126; *Poupard* v. *Fardell*, 18 W. R. 127.)

It seems that a patentee will not be allowed, in an action brought by him for an infringement, to refer to a drawing as descriptive of a material part of the invention not described in the letterpress of the specification (*Clark* v. *Adie*, L. R. 10 Ch. 667; affirmed on appeal, L. R. 2 App. Cas. 315; *Macfarlane* v. *Price*, 1 Stark, 199, 1 W. P. C. 74 *n.*).

In the matter of *Pullan's Patent* (May 1878), leave was given by the Lord Chancellor upon an *ex parte* application to correct a filed specification by the addition of drawings alleged to have been omitted through inadvertence. The drawings so added were not described in the specification. Some months after the addition was effected an application was made to the Lord Chancellor by a person who had been threatened with an action for infringing the patent to re-hear the original application. The Lord Chancellor decided to hear the matter afresh, and upon reading the affidavits filed on both sides, and finding that his order had been made on imperfect information, ordered the added drawings to be struck out of the specification, with costs.

RELATION OF THE COMPLETE TO THE PROVISIONAL SPECIFICATION.

We have seen that the provisional specification need not contain all the details by which the invention is proposed to be carried into effect: it is sufficient if a broad outline of the invention is there sketched, so that

its whole nature is ascertainable. On the other hand, it is permissible for a patentee to let drop some of the features of the provisional specification when he comes to prepare his complete specification, provided there is no fraud; that the essential features of the invention are preserved; and that the complete specification does not claim something different from the provisional specification. (*Thomas* v. *Welch*, L. R. 1 C. P. 192; *Penn* v. *Bibby*, L. R. 2 Ch. 134; *Stoner* v. *Todd*, L. R. 4 Ch. 58; *Wright* v. *Hitchcock*, L. R. 5 Ex. 46.)

Although portions of the provisional specification may within the limits above mentioned be omitted from the complete specification without endangering the validity of the patent; and although the invention set forth in the earlier document may be expanded and developed when the complete instrument comes to be prepared, in accordance with the fuller knowledge which the inventor may then possess, yet he must carefully keep within the lines originally laid down, and must sedulously avoid introducing into the complete specification anything which can be construed as a larger or different invention. A material addition to the invention for which he originally sought protection will not be permitted. Thus, where the provisional specification set forth an invention for preserving animal substances in a fresh state for some time, which consisted in the application of a definite mixture of an aqueous solution of gelatine with an aqueous solution of bisulphite of lime, and the complete specification in addition to the use of that mixture claimed the use for the same purpose of an aqueous solution of the bisulphite of lime alone, this was held to be a distinct matter not covered by the provisional specification. It was an invention 'larger than and different from that disclosed in the provisional specification,' and the patent was therefore invalid (*Bailey* v.

Roberton, L. R. 3 App. Cas. 1055, affirming the decision of the Court of Session in Scotland). And see *United Telephone Company* v. *Harrison*, L. R. 21 Ch. D. 721, where it was held that if part of an invention is insufficiently described in the provisional specification, the patent will be rendered void by the description and claim of that part in the complete specification.

If any part of the invention, as described in the complete specification, does not fall within the title, the patent will be invalid. (*Croll* v. *Edge*, 9 Scott, C. B. R. 479; *Crossley* v. *Potter*, Macr. P. C. 240.) However, where the title of a patent was for 'Certain Improvements in the Doors and Sashes of Carriages,' and the patentee, in his specification, said, 'I have shown my invention as applied to railway carriage-doors and windows, although they are equally applicable to the doors and windows of any other description of carriage or in any position where doors and windows are subject to jar and vibration,' this was held not to extend his claim beyond the title (*Oxley* v. *Holden*, 8 C. B. N. S. 707). See also *Newall* v. *Elliott* (10 Jur. N. S. 954).

A patentee will not be allowed to read the provisional specification with the view of aiding or supplying a defect in the complete specification (*Mackelcan* v. *Rennie*, 13 C. B. N. S. 52).

RULES TO BE OBSERVED IN THE PREPARATION OF SPECIFICATIONS.

Good Faith.

The first thing that a patentee about to specify should bear in mind is, that he is bound to act with *good faith*. There must be no studied ambiguity or equivocal language; no attempt to keep anything secret; he must make a full disclosure of his invention; and his whole specification must be fair, open, explicit, and honest. If he acts in any other manner, it will

bear hardly with him when his specification comes to be examined in a court of justice.

Definition of the Invention.

The next point to be attended to is the accurate definition of the invention, so that the reader may clearly understand of what it consists. In the case of *Macfarlane* v. *Price* (1 Stark, 199; 1 W. P. C. 74) *Lord Ellenborough* said that the patentee in his specification 'should say, My improvement consists in this; describing it by words if he can, if not by reference to figures. But here the improvement is neither described in words nor by figures. . . . A person ought to be warned by the specification against the use of the particular invention, but it would exceed the wit of man to discover from what he is warned in a case like this.' 'Every party' (said *Cresswell, J.*, in *Gibson* v. *Brand*, 1 W. P. C. 640) 'is bound to tell the public clearly by his specification what he claims, and what they may do or not do without risk of an action for infringing his patent.'

A patentee sometimes obtains a second patent for improvements upon an invention which formed the subject-matter of a previous patent, and the second specification usually refers to the first. Care should be taken in preparing the second specification to make it distinguish clearly the later improvements (*Eades* v. *Starbuck Waggon Co.* W. N. 1881, p. 160) from the earlier invention; for notwithstanding the case of *Harmer* v. *Playne* (11 East, 101), there is reason to suppose that unless it can be seen on reading the second instrument, after the expiration of the earlier patent, of what the later invention consists, as something distinguishable from an old part, the second patent would be pronounced invalid.

It seems that when the invention is partly original

and partly communicated from abroad, the latter part should be defined in the specification. (*Renard* v. *Levinstein*, 10 L. T. N. S. 177.)

In the case of a patent for an invention communicated from abroad, it is no answer to an objection that the specification did not sufficiently describe the invention, to say that the patentee has stated all that was communicated to him. (*Wegmann* v. *Corcoran*, L. R. 13 Ch. D. 65.) On the other hand, where an invention communicated from abroad is sufficiently described in the specification, it is not a valid objection to the patent obtained by an agent in this country, that the foreign inventor is possessed of information which has not been set forth in the specification. (*Plimpton* v. *Malcolmson*, L. R. 3 Ch. D. 351.)

Besides furnishing a lucid and precise definition of the invention, the patentee must set forth how it is to be carried into effect so that the promised result may be duly accomplished. The specification must show plainly how the aim and object of the invention can be achieved, and with that view all necessary details, directions, and explanations must be correctly given; all the parts, apparatus, materials, and ingredients must be accurately described; proportions, quantities, times, temperature, and the like, so far as they are respectively material, must be stated, precisely if it can be done, approximately if that only is possible; whilst the needful processes and operations must be fully communicated and clearly unfolded. These things should be taken in proper order and expressed in perspicuous language.

'It is most important' (said *Mr. Baron Alderson*, in *Morgan* v. *Seward*, 1 W. P. C. 170) 'that patentees should be taught that they are bound to set out fully and fairly what their invention is. . . . The specification ought to contain a full description of the way in

which it is to be done. . . . The patentee ought to state in his specification the precise way of doing it. If it cannot be completely done by following the specification, then a person will not infringe the patent by doing it.'

Description must not be vague and general.

When a patentee attempts to secure a right of an extensive nature, the description of the process must not be vague and general. Thus in *Booth* v. *Kennard* (2 H. & N. 84), an action brought for the infringement of a patent for improvements in the manufacture of gas, the specification was held bad, because it claimed generally the exclusive privilege of making oil directly from oleaginous seeds; and, instead of describing particularly how this was to be done, only stated that the mode of using the materials might be 'the same as in the apparatus used in the ordinary mode of making gas from coal.' The Court deemed such a description too vague and general when coupled with a sweeping claim like that above mentioned.

Must mention everything essential.

The specification ought to mention everything which is essential to the carrying into effect of the invention, such as any material, process, appliance, or ingredient. In a patent for trusses, the patentee omitted to state that the steel of which they were made was to be tempered with tallow, and *Lord Mansfield* held it void. (*Liardet* v. *Johnson*, 1 W. P. C. 53.) When a patent was granted to Dr. James for fever powders, he stated in his specification the materials of which they were composed, but omitted to describe the quantity of the ingredients. This being the case, said *Lord Mansfield*, he never durst bring an action for infringement, and it was certainly wise in him not to do

so, as no patent could stand on such a specification. (1 W. P. C. 54 *n.*) The specification of Neilson's patent omitted all mention of water-tuyeres; if the apparatus (said *Parke, B.*) would not be beneficial without them, then it is of no use to the public as it is described in the specification, and the specification would be bad. (*Neilson* v. *Harford*, 1 W. P. C. 317.) When a patentee prepared the specification of his invention of spinning machinery, he said nothing as to the difference in the velocity of certain rollers. Having brought an action for an infringement, and gone into evidence to show what his invention was, *Buller, J.*, remarked, 'The man comes to give an account of the invention, and says, I had calculated, and the difference of the velocity was to be as five to one. Now he has not said a word of that in his specification. In that, he has kept back the knowledge he had as to the size of the rollers and their velocity, and it is left to people to find it out as chance may direct.' The patent was accordingly held bad. (*Rex* v. *Arkwright*, 1 W. P. C. 70.) Again, under a patent for improvements in steam-engines and paddle-wheels, a difference which had to be made in the length of certain rods was not given in the specification, and it was attempted to explain this by saying that the difference in the length, being small, would not be very material. 'But the whole question' (said *Alderson, B.*) 'is small, therefore it ought to have been specified; and if it could not be ascertained fully, it should have been so stated. . . . The small adjustment of these different lengths may have been made for the purpose of making the machine work more smoothly; if so, it is just as much necessary that it should be stated in the specification as that the tallow [referring to the case of *Liardet* v. *Johnson*] should be mentioned.' (*Morgan* v. *Seward*, 1 W. P. C. 182.) The drawing attached to the

specification under a patent for improvements in lamps did not show, and the specification itself did not state, where the air was to be admitted in the second burner, and without admitting air the wick would not burn. *Jessel, M.R.*, held that the specification was insufficient; and to the argument that a workman would correct the drawing by putting in the opening, the judge replied that where the invention is of a trifling nature, and the whole merit very small, if a patentee undertakes to teach people how to do things better, he must fully describe his plan, and not leave anything for the invention of others. (*Hinks* v. *Safety Lighting Company*, L. R. 4 Ch. D. 607.)

A patent was obtained for improvements in floating docks. In an action for an infringement it was proved that the construction of floating docks was not new, but the plaintiff alleged that his invention consisted in the application of iron so as to form airtight and watertight chambers. Now there was no mention of iron in the specification, and it was held both by the judge on the trial and by the Court of Common Pleas that if this were so, the plaintiff had not complied with the conditions of the letters patent, which required him duly to describe the nature of the invention and in what manner it was to be carried out. (*Mackelcan* v. *Rennie*, 13 C. B. N. S. 52.)

The specification under a patent for an invention for preserving animal substances in a fresh state for a long time, stated that it consisted in the application of certain solutions, numbered 1, 2, 3, and 4, to the matters intended to be preserved. The mode of applying the solutions numbered 2, 3, and 4 was set forth, but nothing was said as to the mode of applying solution No. 1. It was held both by the Court of Session in Scotland, and by the House of Lords on appeal, that the patent was bad on account of the want of a suffi-

cient description of the manner in which the invention was to be performed. (*Bailey* v. *Roberton*, L. R. 3 App. Cas. 1055.)

Must precisely describe all materials and ingredients.

A specification, in describing materials and ingredients required for carrying the invention into effect, must not employ general terms which cover what is unsuitable as well as what is suitable. The public has a right to look for definiteness and precision in this respect, and ought not to be put off with vagueness and ambiguity. Experiments would be required to discover which one of the various objects included by the general term is suitable, and that task the law declares ought not to be imposed upon the public. For instance, a specification stated that *fossil salt* should be employed. Now there are various kinds of fossil salt, but it was shown that the only suitable kind for the object in view was *sal gem*, and it was, therefore, held that the specification had given an inadequate explanation of the matter.

The specification under a patent for certain methods of making cements, described a method of making cement from gypsum, in the course of which an alkali, neutralised by an acid, was directed to be used; sulphuric acid and potash being stated to be the best acid and alkali for the purpose. Another method for making cement from limestone and chalk was then described, and consisted also in the use of an alkali, neutralised by an acid. An action was brought for an infringement of this patent. The infringement complained of was the use of borax in making cement, borax being composed of an acid (boracic acid) and an alkali (soda). Now if the patentee confined himself to sulphuric acid and potash, then the defendant was not liable,

seeing that he had used neither; if he claimed the use of all acids and alkalies, his claim was bad, because it was proved that there were some acids and alkalies which would not answer the purpose; and if he claimed only those acids and alkalies which were proper and suitable, he was bound to state what they were, otherwise experiments would be necessary to discover what were suitable and what were not. (*Stevens* v. *Keating*, 2 W. P. C. 194.) See also *Muntz* v. *Foster* (2 W. P. C. 109.)

Hills, in the specification under his patent for the purification of gas, claimed the use of 'hydrated *or* precipitated oxides of iron.' Now, if this meant all hydrated oxides of iron, the claim would have been too large, inasmuch as some of them would not effect the purpose, and the defendant, in an action for an infringement of the patent, argued that this was the meaning. The Court of Exchequer, however, although admitting that the language was not accurate, held, in their desire to uphold the specification, that the patentee meant to refer to such hydrated oxides as were precipitated (*Hills* v. *London Gas Light Co.* 5 H. & N. 312).

Under a patent for improvements on preserving animal substances, the specification stated that the invention consisted of 'the use of the alkaline and earthy sulphites.' But as it was shown that some of the earthy sulphites are poisonous, and that some of the alkaline sulphites possess properties which render them unsuitable for the purpose in view, it was held that the claim to the use of 'the alkaline and earthy sulphites' was too wide and vague, and that the specification ought to have defined more precisely the materials to be used. (*Bailey* v. *Roberton*, L. R. 3 App. Cas. 1078.)

In *Wegmann* v. *Corcoran*, L. R. 13 Ch. D. 63, it appeared that the plaintiff had obtained a patent

for an improved machine or apparatus for treating or preparing meal. The specification stated that the squeezing rolls of the improved machine were to have 'a surface consisting of a material containing so much silica as not to colour the meal or flour,' and the patentee preferred to make them of 'iron coated with china,' and finely turned with diamond tools. It was shown that there are two kinds of china—Oriental or Chinese china, which contains 73 per cent. of silica, and is very hard; whilst the china usually made in this country contains only about 40 per cent. of silica, and is much softer. Now the first kind of china would answer the purpose, but the second would not. It was therefore held by the Court of Appeal, confirming the decision of the court below, that although the invention was useful in milling operations, the specification was ambiguous and inadequate, as it did not state what kind of china was to be employed. Experiments would have been required to discover a suitable material for the apparatus.

A specification will be construed with reference to the state of knowledge at the time it was prepared. Thus, the specification under a patent for a chemical invention will be held to refer to what was known at the time, and not to anything which was discovered subsequently. The language will not be deemed too wide because it is extensive enough to embrace unsuitable ingredients of later discovery. As a patentee would not be allowed to secure the exclusive use of materials unknown at the date of the patent, although the words of the specification are sufficiently ample to cover them, it would be manifestly unjust to hold that his language, having become applicable by the advance of knowledge to more than he contemplated, should render the patent void, if it was properly limited and accurate at the time it was employed. An inven-

tion may be superseded by the progress of discovery, but the specification will not be thereby rendered invalid. (*Badische Anilin und Soda Fabrik* v. *Levinstein*, L. R. 24 Ch. D. p. 156. And see *Crossley* v. *Beverley*, 3 C. & P. 515.)

It is not obligatory on a patentee, when referring to materials and ingredients to be used in carrying his invention into effect, to enter into minute details as to such materials and ingredients, if they are known in the shops, and can be readily purchased under the names which he gives them (*Mackintosh* v. *Everington*, 2 Carp. Rep. 191).

The names of articles mentioned in a specification must be taken to be used in their ordinary commercial sense. Thus, a direction in a specification to use dry arsenic acid in the manufacture of dyes was held to refer to the ordinary arsenic acid of commerce (which is dry to the touch, although it contains water in combination), not to anhydrous arsenic acid, which could not be commonly bought in the trade, and which would not answer the purpose. (*Simpson* v. *Holliday*, 20 Newt. Lon. J. 118; 5 N. R. 340; L. R. 1 H. L. C. 315). And see *Sturtz* v. *De la Rue*, 1 W. P. C. 83 n.; *Stevens* v. *Keating*, 2 W. P. C. 183, 187; *Muntz* v. *Foster*, 2 W. P. C. 104.

A person who takes out a patent for an invention consisting of the use of known materials in new proportions, though bound to state the most suitable proportions within his knowledge, is not bound to limit his claim to the precise proportions recommended by him in his specification. (*The Patent Type Founding Company* v. *Richard*, Johns. 381.)

Whether or not a specification describes with sufficient accuracy the material out of which an article is to be made, is a question for the jury, where the case is tried before one. (*Bickford* v. *Skewes*, 1 W.

P. C. 214; *Derosne* v. *Fairie*, 1 W. P. C. 154; *Elliot* v. *Turner*, 2 C. B. 446; *Wallington* v. *Dale*, 7 Ex. 888.)

Must communicate the latest information.

It frequently occurs that in the interval between the application and the lodging of the complete specification, the inventor discovers that the original invention is capable of material improvement. The intervening period is allowed him for the very purpose of improving the details of his invention; and if he fails to communicate to the public the best information he possesses at the time of lodging the complete specification, the patent will be held void. In *Crossley* v. *Beverley* (1 W. P. C. 117) it was objected that the patentee had added something to the invention as finally specified, but, said *Bayley, J.*, 'I think that if between taking out the patent and filing the specification, the inventor makes a discovery which will enable it better to effectuate the thing for which the patent was obtained, not only is he at liberty to introduce them into his patent, but it is his bounden duty so to do, and it is not sufficient for him to communicate to the public the knowledge he has obtained before the specification.' It must, however, be understood that the additions must strictly relate to the invention as it stood at the date of the application. The introduction of new heads into the specification or an extension of the subject-matter of the original invention will not be permitted. *Crossley* v. *Potter* (Macr. P. C. 240.) *Bailey* v. *Roberton* (L. R. 3 App. Ca. 1055). 'The complete specification, said *Lord Chelmsford* in *Penn* v. *Bibby* (L. R. 2 Ch. D. 58) is in a sense supplemental to the provisional specification, not going beyond nor varying from it as to the nature of the invention, but conveying additional information which may have been

acquired during the currency of the provisional specification as to the manner in which the invention is to be performed.'

Must describe the best method of operating.

A patentee is bound to describe the most advantageous method within his knowledge for carrying his invention into effect; and he ought to put the public in possession of his secret in as ample and beneficial a way as he himself uses it. In *Wood* v. *Zimmer* (Holt, N. P. 57) a patent for a method of making verdigris was contested. It seemed that verdigris was made by the process set forth in the specification; but that the patentee was in the habit of secretly putting aquafortis into the boiler. The copper, forming one of the ingredients, was thereby more rapidly dissolved; but the verdigris produced was neither better nor cheaper than that made according to the specification. *Gibbs, C. J.*, considered however, that this was a prejudicial concealment, and held the patent to be invalid.

Letters patent were obtained for a mode of making a medicine, composed of three salts, commonly sold in the shops under certain well-known names. The specification, instead of describing these salts by their names, described the processes by which they were produced, and then pointed out the proportions in which the salts were to be combined in order to form the medicine the subject of the patent. The methods of producing the separate salts were not essential to the combination, and formed no part of the invention. It was held at *Nisi Prius* that the specification was bad, *Abbott, C. J.*, saying that it is the duty of any one to whom a patent is granted to point out in his specification the plainest and most easy way of producing that for which he claims a monopoly; and to make the

public acquainted with the mode which he himself adopts. If a person would be led to suppose a laborious process necessary to the production of any one of the ingredients, when in fact he might go to a chemist's shop and buy the same thing as a separate simple part of the compound, the public are misled. (*Savory* v. *Price*, 1 Ry. and Moo. 1; 1 W. P. C. 83.)

There are many other cases which show that if the patentee knows of any circumstance which conduces to the advantage of his manufacture or process, he is bound to mention it in his specification. Nothing of importance can be withheld or concealed without danger to the patent. In *Turner* v. *Winter* (1 W. P. C. 81). *Buller, J.*, said, that if the patentee make the article for which the patent is granted of cheaper materials than those which he has enumerated, although the latter may answer the purpose equally well, the patent is void, because he does not put the public in possession of his invention, or enable them to derive the same benefit as he himself does.

If a patentee is acquainted with any particular mode by which his invention may be most conveniently carried into effect, he ought to state it in his specification. Per *Alderson, B.*, in *Morgan* v. *Seward* (1 W. P. C. 170.)

In *Sturtz* v. *De la Rue* (1 Carp. Rep. 463, 5 Russ. 322, 1 W. P. C. 83), it appeared that the patentee had mentioned in his specification a certain substance, under the name of the *finest and purest chemical white lead*, which was to be used in giving paper a glaze, preparatory to its receiving an impression from an engraved plate. He himself imported from Germany, for this purpose, a preparation called *Kremnitz white*; but he said nothing about this in his specification. It was shown that there was no article known in the chemists' shops in London which answered to the patentee's

name, and that the purest white lead which could be purchased there did not answer the purpose. It was held, on these facts, that the patentee had not made that full disclosure which he ought to have made; and his patent was adjudged void. 'A man has no right' (said *Pollock, C. B.*, in his address to the jury on the trial of *Tetley* v. *Easton*, Macr. P. C. 76) 'to patent a principle, and then to give the public the humblest instrument that can be made from his principle, and reserve to himself all the better part of it.' (See also *Derosne* v. *Fairie*, 1 W. P. C. 158.) In *Walton* v. *Bateman* (1 W. P. C. 622), *Cresswell, J.*, laid down this rule:—If a man knows a better mode than that which he states to the public, his patent will be vitiated. And in *Heath* v. *Unwin* (2 W. P. C. 243), *Coleridge, J.*, said, 'If the inventor of an alleged discovery, knowing of two equivalent agents for effecting the end could by the disclosure of one preclude the public from the other, he might for his own profit force upon the public an expensive and difficult process, keeping back the simple and cheap one, which would be directly contrary to the good faith required from every patentee in his communication with the public.'

In *Neilson* v. *Harford* (1 W. P. C. 321) the judge told the jury that if the patentee believed that certain internal partitions in the hot-blast apparatus were useful, the patent would be void, since he had omitted to say anything about them in the specification.

As to the words 'I prefer' in a specification, see *Crompton* v. *Ibbotson* (1 W. P. C. 83); *Wegmann* v. *Corcoran* (L. R. 13 Ch. D. 81).

Need not set forth every application.

On the other hand, an inventor who obtains a patent for the useful application of a principle is not to be called on to set forth every mode of applying it. It is

sufficient if he shows some of its useful applications, those applications being the best illustrations of the invention known to him. See what fell from *Lord Abinger* in *Neilson* v. *Harford* (1 W. P. C. 356), and see *Badische Anilin und Soda Fabrik* v. *Levinstein* (L. R. 24 Ch. D. 176). But it must be borne in mind that a patentee cannot, by making a general claim, cover improvements and applications of which he was ignorant at the date of his specification (*Tetley* v. *Easton*, Macr. P. C. 77).

Must be intelligible to workmen of ordinary skill.

The explanation given by the specification must be intelligible to a person of *ordinary* skill and ability, acquainted with the particular subject; and the directions such that, by pursuing them, he would produce without difficulty the result which the patentee describes. (*Tindal, C. J.*, in *Gibson* v. *Brand*, 1 W. P. C. 631; *Beard* v. *Egerton*, 8 C. B. 165.) *Lyndhurst, L. C.*, said, in *Sturtz* v. *De la Rue* (1 W. P. C. 83 *n.*), that the specification must describe the invention in such a way that a person of ordinary skill in the trade should be able to carry on the process. And *Lord Denman*, in *Bickford* v. *Skewes* (1 W. P. C. 218), said that the specification is addressed, not to persons entirely ignorant of the subject-matter, but to artists of competent skill in the branch of manufactures to which it relates. The persons whom the specification ought to be designed for are persons of *ordinary* skill and ability; not those of special and unusual practice, knowledge, and capacity—not persons at the head of their profession.

A good specification must be intelligible to the ordinary workman using that amount of skill and intelligence which is fairly to be expected from him—not a careless man, but a careful man; though not possess-

ing that great scientific knowledge or power of invention which would enable him by himself, unaided, to supplement a defective or correct an erroneous description. Per *Jessel, M. R.*, in *Plimpton* v. *Malcolmson* (L. R. 3 Ch. D. 568). See also *Neilson* v. *Harford* (1 W. P. C. 371); *Househill Co.* v. *Neilson* (1 W. P. C. 692).

Where the specification under a patent for a chemical operation was concerned, *Mr. Justice Maule* said, 'A competent workman must be taken to know the known properties of iodine, silver, and nitric acid, or else the specification should have included a statement of the properties of each of these substances' (*Beard* v. *Egerton*, 8 C. B. 165).

But when placed in the hands of a person of ordinary skill and intelligence, the specification must be sufficient to show him how the invention is to be carried into effect without further assistance, and without needing corrections or fresh invention on his part. There must be no necessity to try experiments in order to accomplish the end promised by the patentee. In *Rex* v. *Arkwright* (1 W. P. C. 66), *Buller, B.*, said that the specification must be such that mechanical men of common understanding (the validity of a patent for a machine being in dispute) must be able to make the machine by following its directions, without any new additions or inventions of their own. In the luminous address of *Mr. Baron Alderson* to the jury on the trial of the case of *Morgan* v. *Seward* (1 W. P. C. 170) he said that a specification ought to be framed so as not to call on a person to have recourse to more than those ordinary means of knowledge—not invention—which a workman of competent skill in his art and trade may be presumed to have. You may call upon him to exercise all the actual existing knowledge common to the trade; but you cannot call upon him to exercise anything more. You have no right to call upon him to

tax his ingenuity or invention. . . . The specification must not merely suggest something that will set the mind of an ingenious man at work, but it must actually and plainly set forth what the invention is, and how it is to be carried into effect, so as to save a party the trouble of making experiments and trials. And *Parke, B.*, in *Neilson* v. *Harford* (1 W. P. C. 371), said that, to be valid, a specification should be such as, if fairly followed out by a competent workman, without addition or invention, would produce the machine for which the patent is taken out. It had been previously laid down, in *Rex* v. *Wheeler* (2 B. & Ald. 349), that a specification which casts upon the public the expense and labour of experiments and trial is undoubtedly bad. It would, however, seem that if any degree of benefit can be produced by complying with the directions of the specification, and without having recourse to experiments, that would be sufficient to save the patent; it is not necessary that the maximum degree of benefit should be produced (*Neilson's Patent*, 1 W. P. C. 318). In an action for infringing a patent for an improved mode of paving streets with blocks, so shaped that each side of a block was bevelled both inwards and outwards, it was objected by the defendant that the specification gave no direction as to the angle at which the bevels were to be made. The judge who tried the case (*Lord Abinger*) told the jury that if any angle would be of some use, the specification was good; but if some particular angle was essential, then, as the specification left that to be discovered by experiment, it was deficient and bad (*Macnamara* v. *Hulse*, 2 W. P. C. 129). But *Mr. Justice Bayley* said (in the case of *Crompton* v. *Ibbotson*, 1 Carp. Rep. 462) that a patentee, knowing that given materials will not answer the purpose, is bound so to word his specification as to prevent others from trying experiments on that which

he knows will not answer. In this case a patent for an improved method of dyeing and finishing paper came into question; the specification described the paper as being conducted to a heated cylinder by means of cloth, 'which cloth may be made of any suitable material, but I prefer it to be made of linen warp and woollen weft.' Now the patentee had ascertained from repeated trials that no other substance would answer the purpose. It was held that the public had not the full benefit of the inventor's discovery, and persons misled by the specification might be induced to make experiments which the patentee knew would fail (1 W. P. C. 83). This, however, must be considered an extreme case.

In connection with this subject the following observations of *Lord Westbury, C.*, are worthy of attention:—'When it is stated that an error in a specification which any workman of ordinary skill and experience would perceive and correct will not vitiate a patent, it must be understood of errors which appear on the face of the specification, or the drawings it refers to, or which would be at once discovered and corrected in following out the instructions given for any process or manufacture; and the reason is because such errors cannot possibly mislead. But the proposition is not a correct statement of the law if applied to errors which are discoverable only by experiment and further inquiry. Neither is the proposition true of an erroneous statement in a specification amounting to a false suggestion, even though the error would be at once observed by a workman possessed of ordinary knowledge of the subject. For example, if a specification describes several processes or several combinations of machinery, and affirms that such will produce a certain result which is the object of the patent, and some one of the processes or combinations is wholly ineffectual and useless, the patent will be bad although

the mistake committed by the patentee may be such as would at once be observed by an ordinary workman. (*Simpson* v. *Holliday*, 13 W. R. 577.)

It would seem from *Crossley* v. *Beverley* (3 C. & P. 515), that in construing a specification, the state of the particular manufacture at the date of the patent must be kept in view. In this case, in describing a gas apparatus, no directions were given as to a condenser; but since a workman capable of constructing a gas apparatus knew that he would have to put it in, the specification was held sufficient. The patent in *Russell* v. *Cowley* (1 W. P. C. 459) was for a method of manufacturing iron tubes without the use of a mandrel. The specification gave no directions as to leaving out the mandrel; but it was held that an intelligent workman would sufficiently understand, from the purport of the specification, that a mandrel was not to be used. So, in *Beard* v. *Egerton* (8 C. B. R. 165), it was held that a competent operator would perceive, on perusing the whole specification, that it would not be necessary to interpose an operation at a certain stage in the process of daguerreotyping.

Again, in *Otto* v. *Linford* (46 L. T. N. S. 35) the specification under a patent for gas motor engines did not state the proportion of atmospheric air to be let into the chamber where the inflammable gas was fired with the view of producing a gradual in place of an explosive ignition. Nevertheless it was held that as exact proportions were not required to be mentioned, and as there was enough information in the specification to enable a maker of machinery to construct a working engine without exercising his inventive powers, the specification was sufficient.

It sometimes occurs that the drawing attached to the specification is erroneous in some particular, so that if an attempt were made to construct the machine by

the drawing it could not be done, or if made it would not work. If, however, the text has correctly described the construction, or if the error is of a kind which an ordinary workman would easily perceive and rectify, requiring not experiments, but merely regulation, then the error in the figure will be disregarded, and will not be held to vitiate the patent. (*Otto* v. *Linford*, 46 L. T. N. S. 35.)

How combinations should be treated.

The patentee ought to state whether his invention consists of the useful application of a principle, or whether it lies in a particular form or arrangement or combination of parts. It has been already stated (Chap. II.) that a number of old and well-known things, such as implements, machines, or parts of machines, may be combined so as to form a new and useful instrument or machine; and a patent obtained for such combination will be valid, care being taken that the specification does not claim the old parts as well as the novel combination. 'If,' said *Gibbs, C. J.*, to the jury, on trying the case of *Bovill* v. *Moore*, 'a patentee has only invented an improvement, then his specification by which he claims the whole will be bad. If, on the other hand, he has invented an engine which consists of a perfectly new combination of parts, although all the parts were used before, yet he will be entitled to support his patent for a new machine. . . . If a combination of a certain number of these parts existed up to a given point before the date of his patent, and if the patentee's invention sprung from that point, and added other combinations to it, then his specification, stating the whole machine as his invention, is bad.' (Dav. P. C. 404.)

If all the parts of an invention, taken separately, are old, the patent being obtained only for a novel

combination of them, the patentee, in preparing his specification for such an invention, must take care to limit his claim to the new combination. (*Lister* v. *Leather*, 3 Jur. N. S. 811; *S. C.* in error, 8 E. & B. 1004; *Seed* v. *Higgins*, 8 H. L. C. 550; *Potter* v. *Parr*, 2 B. & S. 259.) The case of *Kay* v. *Marshall* (2 W. P. C. 71) deserves attention with reference to this rule. The inventions claimed in the specification were two: first, certain new machinery for macerating flax; and secondly, improved machinery for spinning flax. The first invention would very well have supported the patent separately considered. It was that part of the specification which described the second invention that broke down. The so-called improved machinery, considered in itself, and apart from its application, was shown to be wanting in novelty, and hence the patent fell to the ground. Had Kay, instead of claiming the invention of improved machinery, claimed only the invention of a combination of a known process of wetting flax, with the use of known machinery for spinning the same, certain parts of such machinery being at a given distance from each other, the patent would, doubtless, have been held good. The combination was new, although the process and the machinery were old. The invention was one of great value, and if the specification had been rightly framed, the patentee might have had the benefit of it, without suffering the anxiety and expense of litigation in the common law courts, the Court of Chancery, and the House of Lords.

The case of *Tetley* v. *Easton* (Macr. P. C. 48) went three times before a jury, and on two of the occasions the plaintiff failed by inattention to this rule. His patent was for improvements in machinery for raising and impelling water. The specification described a great number of mechanical contrivances for effecting

the object in view, and concluded by claiming, as the patentee's invention, the several contrivances, 'both when all used in combination, and when used severally.' It was shown, on the trial of the first action for an infringement, that several of these contrivances were old; and with regard to one in particular, which the defendants were charged with infringing, that a person named Hales had previously procured a patent for something substantially the same. The jury thereupon found a verdict for the defendants upon issues which raised the question of the novelty of the plaintiff's invention. Subsequently to this trial the plaintiff entered a disclaimer as to several parts of his specification, and brought another action against the same defendants. The jury again returned a verdict for the defendants. A rule to set aside the verdict, and for a new trial, having been obtained, the legal questions came on for argument before the full court. It appeared that the amended specification described a centrifugal pump, composed of a hollow wheel, revolving within a case furnished with pipes for conveying the water. This wheel was not stated to be old, nor was it disclaimed. The specification claimed generally the machinery for raising and impelling water. It also claimed the application of the inventions before mentioned, 'both when all used in combination, and when used severally.' It was held that the hollow revolving wheel was thereby claimed, and as this was an old invention, the specification was bad. By a second disclaimer the patentee's claims were reduced to the single one of 'the means of increasing the action of the machine by causing the liquid to enter the wheel at both sides;' and he then brought a third action for the infringement of his patent. Unfortunately it was shown that previous inventions had embraced a contrivance for the admission of the water on

both sides of the wheel; and *Mr. Justice Willes* directed the jury to find for the defendant, for the reason that although the wheel had been previously combined with apparatus which made the combination useless, yet that the contrivance in question had been made public property, and could not of itself be made the subject of a patent. The court, on the argument of a rule for a new trial on the ground of misdirection, said that the use of a wheel known before, in a manner known before, could not be deemed an invention capable of sustaining a patent, and held that the judge was right. (2 C. B. N. S. 706.)

The specification under a patent for an improved turning-table for railway purposes, after describing the machinery, claimed as new 'the improved turning-table as hereinbefore described.' Now it appeared, on the trial of an action for an infringement, that no part of the machinery was new except certain suspending rods. It was held that the specification claimed the parts as well as the combination forming the turning-table, and that it was defective by reason of its not distinguishing what was old from what was new. 'Every patentee,' said *Jervis, C. J.*, 'must, in his specification, describe the nature of his invention in such a way as that those who read it with common, ordinary understanding, and fairly read it, may see and understand what is new and what is old.' (*Holmes* v. *London and N. W. Railway Co.*, Macr. P. C. 26.)

In the case of *Foxwell* v. *Bostock* (4 De G. J. and S. 298) *Lord Westbury, C.*, laid down the rule to be that in a patent for an improved arrangement or new combination of machinery, the specification must describe the improvement and define the novelty, otherwise and in a more specific form than by the general description of the entire machine. 'On both principle and authority it is most necessary that the specification

should ascertain the improvement, when the patent is for an improved—that is, for a new combination. At the date of this patent many combinations of machinery, or, in other words, many machines for sewing or stitching by a needle and shuttle, were known and used. If in that state of things a patent is taken out for an improved arrangement or combination, the patentee is bound to show in what the improvement consists, and how it is to be effected. But this obligation is not discharged by a description of the entire machine which embodies the improvement, but which description does not distinguish the improvement; and thereby renders it undiscoverable, except upon a minute comparison and collation of all existing combinations with the new combination that is claimed. A specification so framed has the effect of concealing rather than of disclosing the invention.' The plaintiff's counsel stated that the improvement consisted of an arrangement of three cams on one shaft, by the direct action of which the three principal movements in a needle and shuttle machine were effected. The plaintiff's evidence went to show that this arrangement formed the novelty and utility of the machine. 'But this clear and simple statement is not to be found anywhere in the specification. It is true that the cams and shafts are described indiscriminately with the rest of the machine in the specification, but there is nothing to indicate that it is this addition which constitutes the improved arrangement or the new combination.' The specification was therefore held to be defective and the patent invalid. (See also the observations of *James, L. J.*, in *Parkes* v. *Stevens*, L. R. 8 Eq. 366.)

The case of *Foxwell* v. *Bostock*, however, is not to be understood as deciding that where a combination is alone claimed it is necessary to distinguish the new parts from the old, for in such a case the only invention

protected by the patent is the combination; and if that is properly set forth, it is enough, without separating new parts from old. Under the circumstances supposed, it can be of no moment, so far as the point before us is concerned, whether the parts are all old or partly old and partly new, and therefore a description of the parts and of the manner of arranging them into a working whole, followed by a claim restricted to the combination, will be a sufficient description of the invention. (*Harrison* v. *Anderston Foundry Co.*, L. R. 1 App. Cas 577-583; *Clark* v. *Adie*, L. R. 2 App. Cas. 328.)

The preceding cases will show to patentees whose inventions consist of a combination of parts, the necessity, whilst laying claim to the novel combination, of abstaining from claiming directly or inferentially any of the old parts. On the other hand, if a patentee conceives that he has a right to one or more of the parts as being in themselves novel and useful inventions, he ought to set them forth and claim them. 'If a man really wants to patent not only the whole, but something less than the whole of what he calls "a new arrangement, construction, and combination of parts" he must clearly show that he claims that something less.' (*Per James, L. J.*, in *Clark* v. *Adie*, L. R. 10 Ch. 667; affirmed by the House of Lords, L. R. 2 App. Cas. 315.)

Having studied the rules previously propounded as those by which he ought to be chiefly guided in preparing his specification, the patentee may now be cautioned on the subject of certain faults, which, if committed, would have a disastrous effect upon its validity, and against which, therefore, he cannot be too vigilantly upon his guard.

A specification must not claim too much.

In the first place, the patentee should beware of claiming more than he is strictly entitled to, since a failure in part is a failure altogether, and that to which he has a just right will fall along with that which does not belong to him. To use *Lord Eldon's* illustration —if there be a patent both for a machine and for an improvement in the use of it, and it cannot be supported for the machine, although it might for the improvement merely, it is good for nothing on account of its attempting to cover too much. (*Hill* v. *Thompson*, 1 W. P. C. 247.)

Therefore, if an inventor lays claim to a principle in addition to a new method of carrying it into effect, and it should turn out that the principle was known and had been previously applied to a similar purpose, in such case the patent cannot stand.

In the specification under the patent which formed the ground of dispute in *Hill* v. *Thompson* (1 W. P. C. 239), the patentee claimed not only the use of a particular quantity of lime in smelting iron, but the discovery of the usefulness of lime in that process generally. It appeared, however, that lime had been previously used for the purpose, and the patent was accordingly held bad, although, if the patentee had restricted his claim to the particular proportions of lime and metal, it might have been sustained. Again, the specification under Minter's patent, for an improvement in the construction of chairs, was faulty for a similar reason; its claim was too extensive. The improvement consisted in applying a self-adjusting leverage to the back and seat of a chair, whereby the weight on the seat acted as a counterbalance to the pressure against the back. It was proved that one Brown had previously invented a chair on the same principle, but

[illegible] machine [illegible] Miller had restricted his claim to the particular mode in which he effected the thing, his patent would have been void for [illegible] the specification was generally to the application of a self-adjusting [illegible] to the given purpose, it claimed more than he was entitled to, and if the patent had been good [illegible] would not have sustained [illegible] Miller v. Miller, 1 W. P. C. 134.

Take a patent for improvements in stoves the specification claimed the construction of stoves made in such a manner that the fuel should be consumed from beneath. Now it was shown at the trial of an action of this [illegible] that grates had been previously constructed on this principle: and although the particular manner of effecting the object was new, yet *Lord Ellenborough* held that as the patentee had claimed the principle, which was not new, the patent was bad. Here it is clear that if the inventor had limited his claim to his own mode of carrying the principle into effect his patent would have been upheld. (*Rex v. Cutler*, 1 Stark. 354, 1 W. P. C. 76.)

The case of *Rex* v. *Else* (1 W. P. C. 76) affords another instance of the same error. The specification claimed in effect the exclusive right of combining silk and cotton thread, and then of making lace of the combined material. It was proved that silk and cotton thread had previously been combined in some mode or other; and although the material so constructed was unfit for making lace on account of its coarseness, yet as the patentee did not confine himself to any particular mode of combining the two, his claim was held to extend to every mode, and was therefore bad.

Fisher and Gibbons obtained a patent in 1844 for an invention of a machine in which a shuttle was com-

bined with a needle for producing stitches to ornament fabrics. In 1846 Thomas procured a patent for improvements in machinery for sewing and stitching various fabrics. His specification was construed as claiming generally the use of needles in combination with shuttles for producing stitches; and although he showed one particular form of a needle and shuttle machine which was a different combination from that described by Fisher and Gibbons, it was held that, having regard to the language employed, his claim could not be confined to that particular combination. His patent was, therefore, invalid in consequence of the patentee claiming too much. (*Thomas* v. *Foxwell*, 5 Jur. N. S. 37; 6 Jur. N. S. 271.)

Under a patent for improvements in weaving figured fabrics, the specification described, and the drawings illustrated, mechanism for weaving coach lace, but the patentee said that he did not confine himself to narrow goods only, as his improvements were applicable to the production of carpets. It was shown that the specified mechanism could not be adapted to the weaving of carpets by merely enlarging it, but required certain additions to be made to it before it could be employed for that purpose. *Pollock*, *C. B.*, told the jury, at the trial of an action for an infringement, that if carpets could not be made by the means stated in the specification, the patent was not good; and the jury returned a verdict in favour of the defendant. (*Crossley* v. *Potter*, Macr. P. C. 240.)

Ralston's patent was for embossing and finishing woven fabrics, and for the machinery employed therein. His specification described the invention as consisting of the use of a metal or wood roller, *engraved with any required design*, in combination with a bowl, that is a smooth paper roller, the two being driven at different rates of speed. By moving the fabric transversely

when fed up to the machine, a great variety of watered patterns might be given. The object of the invention was stated to be the production of *an indefinite variety of patterns*, as well as a bright finish or lustre. This patent failed to stand the ordeal of an examination in the courts of law, on account of the patentee having claimed too much. It was proved that the use of a *patterned* roller, in combination with a bowl moving at the *same speed*, was not new in the operation of *embossing* fabrics, and that the use of a *plain* roller and bowl moving at *different rates* of speed was well known in the operation of *finishing or calendering* fabrics. It was therefore held that the patentee's combination, as stated in the specification, was not a patentable invention. Had he restricted his claim to the use of a patterned roller with *circular* grooves (which alone produced the watered effect) in combination with a bowl, the two moving at different rates of speed, for a specific purpose, viz. the double operation of finishing the fabric and producing a watered effect by one process, there is ground for supposing that he might have retained his patent. (*Ralston* v. *Smith*, 9 C. B. N. S. 117; 11 C. B. N. S. 471; 11 H. L. Cas. 223.) We may refer to the cases of *Booth* v. *Kennard*, (2 H. & N. 84) *Saunders* v. *Aston* (13 B. & Ad. 886; 1 W. P. C. 75 *n.*), and *Haworth* v. *Hardcastle* (1 W. P. C. 484), as further illustrations of this point.

We must not forget, however, the remarks made by *Jessel*, *M. R.*, in the case of *Frearson* v. *Loe* (L. R. 9 Ch. D. 58): 'It does not follow that because an inventor thinks he has invented more than he has in fact, and describes the advantages of his invention, and some of these advantages arise from an old portion of the invention, it may not still be a good patent, provided that the invention as claimed is so limited as to fail to cover the actual thing in use, while it covers

some of the advantages mentioned; in such a case it may still, no doubt, be a good patent.'

It was also decided by the House of Lords in *The British Dynamite Company* v. *Krebs* (Goodeve's cases, p. 88) that an appendant claim to something old did not vitiate a patent. In this case the patentee had claimed the manufacture of the dynamite which was found to be new and also claimed the means of firing by special ignition as described. Some of these means of firing being old and well-known as applied to other explosives, the House of Lords construed this claim as being only appendant to dynamite and upheld the patent. It is not, however, advisable for inventors to make claims of this kind, which if held to extend the patent would invalidate it, and if held not to extend it are simply useless.

Must not make large speculative claims.

A patentee will not be allowed to make wide hypothetical or speculative claims based on mere conjecture or surmise, nor will his patent be permitted to cover matters of which he was ignorant at the date of his patent. In the specification under a patent for improvements in machinery for raising water, the patentee said, 'If any gases or elastic media other than atmospheric air are used, with which to charge the case [part of the machinery], I claim the sole right to do so.' *Pollock, C. B.*, who tried an action brought for infringing this patent (*Tetley* v. *Easton*, Macr. P. C. 48), remarked upon this passage, that he had no hesitation in saying that, in point of law, the patentee had no right to make such a claim, and he went on to state that the law would not permit a patentee to claim more than he has invented. 'It will permit him to claim that which he has invented by means of successful experiments or otherwise, and which he has given to the public, but not that which is the mere subject of his

speculation or imagination, or of his endeavouring to grasp more than he is entitled to. I think we are bound to give, as far as possible, the fullest effect to an invention; but, on the other hand, I think we are also bound to oppose the endeavours to make a patent grasp at and embrace a number of matters that were never in the head of the inventor.'

In another part of the specification, the patentee described a wheel with straight arms, and then he said, 'I propose to construct the wheel of every variety of configuration, so long as it is constructed with a channel in the interior.' The defendant had made use of a wheel with *bent* arms, and the patentee treated this as an infringement, although he admitted that at the time he obtained his patent he had never thought of bent arms, and also that curved arms almost trebled the effect of the machine. The judge told the jury that the patentee's claim to every shape of arm would not stand. To hold that it was good would be to reward a man who had rashly and ignorantly taken out a patent on a subject he had not appreciated. The same learned judge, when presiding at the trial of *Stevens* v. *Keating* (2 W. P. C. 184)—an action for infringing a patent for processes for combining materials to form cements,—said, with reference to that part of the specification which was held to claim the use, not only of a particular acid, but of all acids which might succeed, that no patentee could be allowed to make such a claim, and to say, Whereas other substances will succeed, I claim them all.

A perusal of these cases will show that it is safer for a patentee to restrict his claim to the use of those processes, or those materials, which he has found by actual trial to answer the purpose, than to extend it to matters of which he has no accurate knowledge; since, in doing this, he may either claim something which will not

answer the object in view, something which is not new, or something which he does not sufficiently describe. The law will aid him, without any general claim in his specification, in repressing infringements which are an illegal imitation of his process behind a colourable variation, or by means of mechanical or chemical equivalents.

'The safest course for patentees to adopt' (said *Pollock, C. B.*, to the jury on the trial of *Crossley* v. *Potter*, Macr. P. C. 256) 'in framing their specifications is, instead of including everything, to confine themselves specifically to one good thing, and a jury will always take care that if that be a real invention, no man under colour of improvement shall be allowed to interfere with that which is the offspring of their genius.'

Ambiguity to be eschewed.

The fatal effect of ambiguous language in a specification is illustrated by the case of *Hastings* v. *Brown* (17 Jur. 648; *S.C.*, 1 E. & B. 454). A patent was obtained for arrangements for raising ships' anchors, and the specification claimed as the invention 'a cable-holder to hold without slipping a chain cable of any size,' but it could not be gathered from it whether the inventor claimed a cable-holder to hold chain cables of any *one* size, or to hold chain cables of different sizes. Now, a cable-holder to hold a chain cable of any one size was already known at the date of the patent. 'The patentee,' said *Lord Campbell*, when the case was argued before the Court of Queen's Bench, on a motion to enter a nonsuit, 'ought to state distinctly in his specification what is his invention, and to describe the limits within which he is to enjoy a monopoly. That is not done in this case with respect to the nature of the cable-holder. What is

claimed [in the pleadings] is a right to construct a capstan which will raise chain cables of different dimensions. Does the plaintiff disclose in his specification that he claims that invention? If it is only claimed with regard to one cable, then there is no infringement of the patent. The vice of the specification is, that it is quite equivocal what the claim is. There is nothing in the title which at all assists us; and when we look to the description in the specification, which speaks of "a chain cable of any size," I think that the proper construction to be put upon the words is that they mean "one chain cable." At all events, they are capable of that meaning; and if the specification is equivocal, it is bad.' And *Mr. Justice Coleridge* added, 'If the specification on a fair interpretation be equivocal, it is insufficient.' The rule for a nonsuit was accordingly made absolute.

Must not describe two methods when only one is effective.

If two methods of doing a thing are described in the specification, and by one of these it cannot be done, the specification is bad. (*Regina* v. *Cutler*, Macr. P. C. 137; *Beard* v. *Egerton*, 8 C. B. 165.)

Medlock's specification of his invention for making red and purple dyes from aniline commenced the description of the process thus:—'I mix aniline with dry arsenic acid and allow the mixture to stand for some time, *or* I accelerate the operation by heating it to or near its boiling-point until it assumes a rich purple colour, and then I mix it with boiling water and allow it to cool: when cold it is filtered and decanted.' When the case went before the House of Lords, it was held, in affirmation of the view taken by the Lord Chancellor, that on the construction of the whole specification two processes, a hot and a cold process,

were described, and as it was proved that only the hot process was effective, the specification was declared to be bad and the patent consequently invalid. It was urged that every person well informed on the subject could see that the cold process was ineffective, but 'this,' it was said, 'would be to correct the specification by the superior intelligence of the reader.' (*Simpson* v. *Holliday*, 13 W. R. 577, affirmed L. R. 1 H. L. 315.)

Must not contain misdirections or misrepresentations.

If the specification contains language calculated to mislead as to an important part of the patented process, as where it contains positive misdirections as to the mode of operating, the patent will likewise be void. 'You must not mislead people' (said *Jessel, M. R.*, in *Plimpton* v. *Malcolmson*, 3 L. R. Ch. D. 531, 576) 'by telling them to do something wrong, and leaving them to find out the mistake. . . . You must not give people mechanical problems and call them specifications.'

On the trial of *Palmer* v. *Wagstaff* (Newton's Lond. Journ. vol. xliii. p. 131), an action brought by a candle manufacturer for an infringement of a patent for improvements in the manufacture of candles, it was alleged that the specification contained a positive misdirection as to the position in which the wicks were to be placed in the process of manufacture. The object proposed was the production of a candle requiring no snuffing, by using two or more plaited wicks, arranged in such a manner that they would separate and bend outwards as the candle was burned. Now, it was shown that if the directions of the specification were followed, the candle would require lighting at the bottom instead of the top. If lighted at the top, the wicks converged instead of diverging, and pro-

duced a long snuff. The judge (*Pollock, C. B.*) told the jury that this was a serious mistake; and though the verdict was given against the plaintiff upon other points than those connected with the validity of the specification, there is reason to suppose that this instrument could not have been supported. See also *Savory* v. *Price* (1 Ry. and Moo. 1; 1 W. P. C. 83); *Bickford* v. *Skewes* (1 W. P. C. 218).

It may be inferred, from the case of *Huddart* v. *Grimshaw* (1 W. P. C. 85), that the assertion in the specification of something being important, when in point of fact it is not, will vitiate the patent, because there is evidence of an attempt to deceive. In *Turner* v. *Winter* (1 W. P. C. 80), *Ashurst, J.*, said that if there is any unnecessary ambiguity affectedly introduced into the specification, or anything which tends to mislead the public, the patent is void. And it was laid down in *Galloway* v. *Bleaden* (1 W. P. C. 524), that if there is a want of clearness in the specification, so that the public cannot afterwards avail themselves of the invention, much more if there is any studied ambiguity in it, so as to conceal the invention from the public, no doubt the patent would be completely void. Again, if anything is said to be immaterial which is in reality material, this will be a fatal defect. Thus, in *Neilson* v. *Harford* (1. W. P. C. 313), *Parke, B.*, said, 'The patentee states that the size and form of the vessel in which the air is heated, previous to its being driven into the furnace, are immaterial. Now, my strong opinion is that the clause is an incorrect statement, and that, being untrue, vitiates the specification, and prevents the patent from being a good patent.' See also *Simpson* v. *Holliday* (13 W. R. 577, affirmed L. R. 1 H. L. 315).

Misrepresentations as to the object or capabilities of the invention, or as to other important matters, will

deprive the inventor of the benefit of his patent. For instance, a patent was obtained for a machine for making paper in single sheets from one to twelve feet wide. It was proved that the machine would make paper only of one definite width, and that if paper of some other width was required, another machine must be employed. It was held by the Court of K. B. that the capability of the machine had been misrepresented in an important respect, and that the patent was void (*Bloxam* v. *Elsee*, 6 B. & C. 169). And see *Crossley* v. *Potter* (Macr. P. C. 249).

Simple mistakes.

Simple mistakes, being merely words used in an inaccurate sense, which words are often used, and are explained by the context, or by the drawings annexed, will not avoid the patent. Thus, in *Bloxam* v. *Elsee* (1 C. & P. 558; 1 Carp. Rep. 439), the specification made use of the expressions *vis de pression*, *vis de répulsion*, and *vis de réaction*, for different screws; but the context and the drawings showed what was meant, and the objection taken on this ground was not sustained. In another specification the word 'discolour' was used, with the meaning 'discharge the colour.' This, though a mistake in translating the French word 'décolorer,' was held not important enough to vitiate the instrument. A court of law will not insist upon accuracy in minute and unimportant matters; it will not insist upon strict logical correctness; it will overlook such evident errors as the mention of 'imponderable substances.' (*Pollock, C. B.*, in *Tetley* v. *Easton*, at Nisi Prius, Newton's Lond. Journ. vol. xlii. p. 58.) All it requires is that the patentee shall make his meaning clear, and that his language shall be intelligible to the persons to whom it is addressed.

It was said in the House of Lords that after a patent has stood inquiry and the test of time, the courts do not encourage verbal objections to the form of the specification. (*Neilson* v. *Betts*, L. R. 5 H. L. 1.)

Claims.

Before the passing of the Patent Act of 1883 it had become usual for patentees to insert at the close of their specifications certain clauses which were known as 'claims.' The insertion of claiming clauses was not then prescribed by the law, but they offered the patentee an opportunity of summing up his invention, and of setting forth in a brief form what he considered to be its pith and essence.

By the fifth subsection of the fifth section of the Act it is directed that a complete specification shall end with a distinct statement of the invention claimed, and therefore a patentee is henceforth bound, after describing the entire machine, apparatus, or process, to define his invention in such a manner that the public may learn what it is that he claims as his exclusive right.

It has hitherto been a common practice in framing the claiming clauses to set forth the invention in very short terms, and to refer to the description contained in the body of the specification, using the phrase 'as hereinbefore described.' In such cases it became necessary to examine the previous description, in order to see what the invention really was. But as the new Act requires the patentee to make 'a distinct statement of the invention claimed,' it may be expected that he will now be obliged to give a more precise definition of the invention in the claim itself than it has hitherto been usual to do.

In preparing this part of his specification the patentee should be careful neither on the one hand to

include matters that are beyond the boundary of the invention, nor on the other to restrict his rights within too narrow limits.

'The real object of what is called a claim' (said *James, L. J.*, in *Plimpton* v. *Spiller*, L. R. 6 Ch. D. 412, 426) 'is not to claim anything which is not mentioned by the specification, but to disclaim something. A man who has invented something gives in detail the whole of the machine in his specification. In doing that he is of necessity very frequently obliged to give details of things which are perfectly well known and in common use; he describes new combinations of old things to produce a new result, or something of that kind. Therefore, having described his invention and the mode of carrying that invention into effect, by way of security he says, "But take notice I do not claim the whole of that machine; I do not claim the whole of that *modus operandi*, but that which is new, and that which I claim is that which I am now about to state." That really is the legitimate object of a claim, and you must always construe a claim with reference to the whole context of a specification.'

Where a specification clearly and distinctly claims a combination alone, a patentee is not bound to disclaim expressly everything he has described, because in such a case it will be held that everything which is not claimed is impliedly disclaimed (*Harrison* v. *Anderston Foundry Company*, L. R. 1 App. Cas. 574); and, therefore, where a patentee claims in his specification only an entire combination, he will be considered not to have claimed any of the minor combinations. A combination of three parts is a different thing from a combination of two of them; and if a patentee desires to secure the minor combination he must distinctly claim it (*Clark* v. *Adie*, L. R. 10 Ch. 667; affirmed on appeal, L. R. 2 App. Cas. 315).

'It has long been the practice' (said *Jessel, M. R.*, in *Hinks* v. *Safety Lighting Co.*, 4 Ch. D. 607) 'to insert in specifications the distinct claim of what is said to be comprised in the patent; meaning that nothing else is comprised, that everything else is thrown open to the public; or, to put it into other words, if a man has described in his specification a dozen new inventions of the most useful character, but has chosen to confine his claim to one, he has given to the public the other eleven.'

In drawing the claims in a specification which refers to a machine or apparatus consisting of many old and new parts, it is desirable to introduce a general claim to the entire machine as a combination, and then separate claims to the new minor combinations and to the new parts. An observance of this rule will be attended with useful results, in case there should arise any necessity for disclaiming part of the invention.

Under the old law all the claiming clauses might be struck out of the specification by disclaimer, if there remained sufficient in the specification to show distinctly what the invention was. (*Thomas* v. *Welch*, L. R. 1 C. P. 192.)

In *Kay* v. *Marshall* (2 W. P. C. 39), *Cottenham, L. C.*, said, 'The claim is not intended to aid the description, but to ascertain the extent of what is claimed as new. It is not to be looked to as the means of making a machine according to the patentee's improvements. If, therefore, the specification containing the description be sufficiently precise, it cannot be of any consequence that expressions are used in the claim which would be too general if they proposed to be part of the description.' See also *Lister* v. *Leather* (3 Jur. N. S. 811; *S. C.* in error, 8 E. & B. 1004).

On the other hand, where the description in a specification was in the first instance too general, but the inventor afterwards in describing his invention referred to certain figures in drawings annexed to the specification, and the claim was for the invention *described with reference to those figures*, the specification was held sufficient (*Daw* v. *Eley*, 14 W. R. 126, and on another hearing, L. R. 3 Eq. 497). See also *Russell* v. *Cowley* (1 W. P. C. 465); *Thomas* v. *Welch* (L. R. 1 C. P. 192).

In the case of *Arnold* v. *Bradbury* (L. R. 6 Ch. 706) it appeared that the specification under a patent for an improved ruffle and sewing machine stated that the invention related to an improved frill or gathered fabric, and to the machinery for making the same; that the apparatus used in producing the article consisted of a peculiar mechanism for gathering and feeding one of the fabrics operated on, which mechanism was used in combination with a sewing machine, the latter being modified to receive it. The gathers in a fabric were fed into the machine by mechanism without being scratched by a pointed instrument as when formed by hand. A description of the mechanism was given. Drawings figured the mechanism, and one of them showed a portion of a sewing machine to illustrate its operation. The claims were for—(1) The *production by machinery* of gathered work when it was simultaneously attached to a plain fabric by stitches; (2) *the production by machinery* of gathered work when it was simply gathered and secured on itself by stitches; and (3) the combination of mechanism for gathering with the mechanism of a sewing machine for the two purposes above mentioned. It was contended by the defendants, who admitted the infringement, that the patent was void, because the first two claims were too wide and general, inasmuch

as they claimed the production of gathered work by any kind of machinery. *Lord Hatherley, L. C.*, however, said that a claim must be very large and vague indeed to justify any court in saying that it is impossible to sustain a patent based upon it. He read the first claim as one for the production by machinery of that which had not been done by machinery before, viz. an improved frill. The inventor had stated in what the improvement consisted, and he described the machinery by which it was produced; and then he said, I claim the producing of this by machinery, of which machinery I have given full details. In other words the judge read the specification as not claiming more than the production of gathered work by the machinery therein described. As to the second claim, his lordship said that he could not tell that the frill produced without being scratched was not more durable and elegant than one formed by hand and scratched. If the inventor had produced a machine which dispensed with an injurious process, the judge said he could not in the absence of evidence take upon himself to say that it would not be the subject-matter of a patent, and he decided that there was no ground for holding that the claims were too large *per se*.[1]

As to the construction of a claim which can be read in two senses, one of which would make the patentee appear to claim something which was well known and in common use, see *Cropper* v. *Smith*, Court of Appeal, W. P. C. p. 81, and *Westinghouse* v. *Lancashire and Yorkshire Railway Company*, *ibid.* p. 98. And see what fell from *Tindal, C. J.*, in *Haworth* v. *Hardcastle*, 1 W. P. C. 484. If one construction would

[1] Lord Hatherley remarked in this case that it was a singular fact that no case had been cited from the law books of any claim being held to be too large on account of the greatness of the claim independently of external evidence.

imply that the claim is practically a repetition of what has gone before and entirely superfluous, yet so long as it does not seek to enlarge the monopoly beyond what the patentee is entitled to, it will not make the patent invalid. (*Plimpton* v. *Spiller*, L. R. 6 Ch. D. 412.)[1]

INTERPRETATION OF SPECIFICATIONS.

When a patent case is tried before a jury it is the duty of the judge, where a specification comes into question, to explain to the jury what that instrument directs to be done, and it is for the jury to say whether, upon the evidence, the promised result will be accomplished by pursuing those directions. (*Per Cresswell, J.*, in *Beard* v. *Egerton*, 8 C. B. 165; 19 L. J. C. P. 36.)

Formerly there was a disposition in the Courts to take part against patentees, under the impression that monopolies were not to be encouraged, attaching the old odious sense of the term to the phrase indicating a patent privilege for an invention. Then came a change, and some of the judges thought that a specification ought to be read with indulgence; that a liberal construction should be put upon it, and that the words should receive a benign or a benevolent interpretation. But of late years the Courts have laid down that specifications are to be construed like other written documents, that is, with a disposition to read them fairly, and with an endeavour to ascertain their real meaning, not straining the language nor giving effect to petty objections. In the case of *Newton* v. *Halbard* (Hil.

[1] The following decisions have reference to the interpretation of 'claims:'—*Palmer* v. *Wagstaff* (9 Exch. 494); *Macalpine* v. *Mangnall* (3 C. B. 496); *Templeton* v. *Macfarlane* (1 H. L. C. 595); *Sellers* v. *Dickinson* (5 Exch. 312); *Seed* v. *Higgins* (8 H. L. C. 550); *Thomas* v. *Foxwell* (6 Jur. N. S. 271); *Dangerfield* v. *Jones* (13 L. T. N. S. 142); *Thomas* v. *Welch* (L. R. 1 C. P. 192); *Jordan* v. *Moore* (L. R. 1 C. P. 624); *Daw* v. *Eley* (L. R. 3 Eq. 497); *Hinks* v. *Safety Lighting Co.* (L. R. 4 Ch. D. 607); *Wright* v. *Hitchcock* (L. R. 5 Ex. 73); *Arnold* v. *Bradbury* (L. R. 6 Ch. 706); *Harrison* v. *Anderston Foundry Co.* (L. R. 1 App. Cas. 574); *Westinghouse* v. *Lancashire and Yorkshire Railway Co.* (1 R. P. C. 98); *Cropper* v. *Smith* (1 R. P. C. 81).

Term, 1872) Mr. Justice Grove said, 'A specification should not be construed in a technical or captious spirit, but with a fair intention to give it effect if it be reasonably intelligible.' In the case of *Harrison* v. *The Anderston Foundry Co.* (L. R. 1 App. Cas. 574) *Lord Chelmsford* said, 'In the construction of a specification it appears to me that it ought not to be subjected to what has been called a benign interpretation, or to a strict one. The language should be construed according to its ordinary meaning, the understanding of technical words being, of course, confined to those who are conversant with the subject-matter of the invention.' 'I am anxious' (said *Jessel, M. R.*, in *Hinks* v. *Safety Lighting Company*, L. R. 4 Ch. D. 607), 'as I believe every judge is who knows anything of patent law, to support honest *bonâ fide* inventors who have actually invented something novel and useful, and to prevent their patents from being overturned on mere technical objections or on mere cavillings with the language of the specification, so as to deprive the inventor of the benefit of his invention. This is sometimes called a "benevolent" mode of construction. Perhaps that is not the best term to use, but it may be described as construing a specification fairly, with a judicial anxiety to support a really useful invention, if it can be supported on a reasonable construction of the patent.' See also the remarks of the same learned judge, and of *Brett, L. J.*, in *Plimpton* v. *Spiller* (L. R. 6 Ch. D. 412). Also the observations of *Jessel, M. R.*, in *Otto* v. *Linford* (Court of App., 46 L. T. N. S. 35). In *Dudgeon* v. *Thomson* (L. R. 3 App. Cas. 53) *Lord Blackburn* said, 'I apprehend the duty of the court is fairly and truly to construe the specification, neither favouring the one side nor the other; neither putting an unfair gloss or construction upon the specification for the purpose of saving a patent, nor in order to extend it.'

The same learned judge, in *Clark* v. *Adie* (L. R. 2 App. Cas. 423), said, 'In construing the specification we must construe it like all written documents, taking the words and seeing what is the meaning of those words when applied to the subject-matter; and in the case of a specification which is addressed, not to the world at large, but to a particular class, namely, skilled mechanicians possessing a certain amount of knowledge, it is material for the tribunal to put itself in the position of such a class, . . . and by the admission of evidence or otherwise put itself in a position to understand and then to say what the words of the specification mean when applied to such a subject-matter.' In delivering the judgment of the Court of Appeal in the same case (L. R. 3 Ch. D. 142), *James, L. J.*, said, 'It cannot be effectually contended that there is any principle to be applied to the construction of specifications which differs from that applicable to the construction of every written instrument whatever. Of course, in ascertaining the meaning of words used, you endeavour to put yourself as much as possible in the position of the person using them.'

'A specification' (said *Fry, J.*, in *Wegmann* v. *Corcoran*, L. R. 13 Ch. D. 77) 'ought to be read as a whole, and with the view of ascertaining whether it fairly and honestly and with sufficient exactitude describes the invention.'

The construction of a specification belongs to the court alone, but if the case is tried before a jury then the attendant circumstances and the true meaning of the technical phrases, if there be any, are questions which must be ascertained by the jury (*Neilson* v. *Harford*, 1 W. P. C. 370; *Bovill* v. *Pimm*, 11 Ex. 718; *Otto* v. *Linford*, Court of App. 46 L. T. N. S. 35). 'Where novelty or infringement' (said *Lord Campbell*, in *Seed* v. *Higgins*, 8 H. L. C. 561) 'depends

merely on the construction of the specification, it is a pure question of law for the judge; but where the consideration arises how far one machine imitates or resembles another in that which is the alleged invention, it generally becomes a mixed question of law and fact which must be left to the jury.' It is also for the court to decide the question as to the identity of inventions described in two nearly contemporaneous specifications, when such questions can be determined by a simple comparison of the specifications. (*Per Coltman, J.*, in *Allen* v. *Rawson*, 1 C. B. 571; *per Pollock, C. B.*, in *Tetley* v. *Easton*, at Nisi Prius, Macr. P. C. 68; and *per Erle, J.*, in *Bush* v. *Fox*, Macr. P. C. 168; *Booth* v. *Kennard*, 2 Hurlst. & Norm. 84; *Thomas* v. *Foxwell*, 6 Jur. N. S. 271; *Hills* v. *London Gas Light Company*, 5 Hurlst. & Norm. 312. See, however, the observations of *Tindal, C. J.*, in *Muntz* v. *Foster*, 2 W. P. C. 105.) But if anything more than simple comparison is required to determine the identity or dissimilarity of two inventions, the question must be submitted to the decision of the jury.

'We by no means lay down as a general rule' (said *Lord Campbell, C. J.*, in *Thomas* v. *Foxwell*, 5 Jur. N. S. 37) 'that upon a question of novelty of invention such as this, raised by the comparison of two specifications, it must necessarily be a question of law for the court. The specifications may contain expressions of art and commerce upon which experts must be examined, and there may be conflicting evidence, raising a question of evidence to be determined by the jury. But it is quite clear that there may be cases in which the court would be bound to decide the question of novelty exclusively, for the two specifications might be, *in ipsissimis verbis*, the same; and if they be in such plain and common language that the judge is sure he understands their meaning, he is bound to

construe them as he does other written documents.' 'If there be two specifications to be compared' (said *Lord Westbury, C.*, in *Hills* v. *Evans*, 4 De G. F. & J. 288–298), 'in order to arrive at a conclusion of fact, the right of drawing the inference of fact from the comparison belongs to the jury, and is a question of fact, and not a question of law.'

Steiner obtained letters patent for a new manufacture of a certain colouring matter called garancine, extracted from madder-root, and extensively used in dyeing. This colouring matter was formerly extracted by simply boiling in water, and the refuse matter, termed 'spent madder,' was thrown aside as useless. Steiner's process, under his first patent, obtained in 1832, was the employment of diluted sulphuric acid of a given strength, and he proposed to apply it to the extraction of the colouring matter from both fresh and spent madder. So weak a solution of sulphuric acid had, however, little effect upon the spent madder; and in 1843 Steiner took out another patent. A much stronger solution of sulphuric acid was now used, and heat was employed. The process was specially applicable to the extraction of garancine from spent madder, and he thus obtained a large portion of the garancine which had previously remained attached to the woody fibre. *Pollock, C. B.*, at the trial of an action brought for an infringement of the latter patent (*Steiner* v. *Heald*, 2 Car. & Kir. 1033), thought that the process was substantially the same as that described in the specification under the first patent. 'It appears to me that this is precisely the same as if you applied a process to grapes already imperfectly squeezed, by which you squeeze a little more juice out of them than was formerly done.' Believing the invention to be destitute of novelty, he directed the jury that, in point of law, the alleged invention

(viz. the one under the second patent) was not any manner of manufacture for which letters patent could be lawfully granted. The jury gave their verdict in favour of the defendant, but the verdict was set aside, and a new trial granted on the ground of misdirection. The judge, it will have been observed, treated the conclusion to be drawn from the evidence as a matter of law; whereas he ought to have left it to the jury to say whether fresh and spent madder had different properties, chemical or otherwise, or whether they were the same thing, with the difference only that part of the colouring matter had been already extracted. If the properties of the two substances were different, the invention was a new manufacture; but if the two things were the same, except that one was more charged with colouring matter than the other, in that case the invention claimed would simply have been the application of a process already known, producing a known result. The object to which the process was applied not being different from that to which it had been formerly applied, in which case there would have been no new invention, it was for the jury to say, upon the evidence, whether the invention was a new manufacture or not. (*Steiner* v. *Heald*, 6 Exch. Rep. 607.)

The most important case decided of late years with reference to the interpretation of specifications is that of *Betts* v. *Menzies*, in the House of Lords (10 H. L. C. 117), in which it was held that even where there is an identity of language in two specifications, if such identity consist merely in technical terms, it must be considered impossible for the judge to predicate what exact meaning the first patentee attributed to such terms, if any long interval of time, such as the interval from 1804 to 1848, elapsed between the two specifications. Under these circumstances the judge ought not to take upon himself to decide as to the

identity of the inventions, guided only by the similarity of language. He cannot assume that the inventions are substantially the same because the expressions employed are similar. The identity or dissimilarity is a fact which cannot be decided without hearing evidence on the point; and if the case is tried before a jury it is a fact for their decision. And in a subsequent case on the same patent, *Sir W. P. Wood, V. C.*, appears to have considered that it is no ground of proof of the effect of a long anterior patent that scientific persons of the present day, with all the superior knowledge obtained by the advance of science, depose that they could produce the same results by the process disclosed by the earlier patent, as that described in the subsequent one. (*Betis* v. *De Vitre*, 11 L. T. N. S. 445.)

It may here be remarked, that where there is doubt as to the meaning of particular expressions, competent persons may be called for the purpose of explaining the matter; but evidence is not admissible to explain or alter the plain and precise words of a specification, or to correct mistakes in it. (*Neilson* v. *Harford*, 1 W. P. C. 313.) In *Elliot* v. *Turner* (2 C. B. 446) it was held that the words of a specification are to be construed according to their ordinary and proper meaning, unless there be something in the context (which may be explained by evidence) to show that a different construction ought to prevail. Of course it is allowable to call persons of skill in the department of practical art to which the invention belongs, for the purpose of saying whether or not they understand the specification, and whether or not they could execute its directions, so as to produce a useful result. (See *C. J. Tindal's* remarks in *Walton* v. *Potter*, 1 W. P. C. 595.)

In the case of *British Dynamite Company* v. *Krebs*, (Goodeve's cases, p. 88) the House of Lords reversed the decision of the Lords Justices of Appeal on the ground

that the description of the mode of manufacture as set out in the specification had been conclusively proved to be sufficient for all practical purposes. The four law lords were unanimously of opinion that since it was shown in evidence that the patented article had been made by following the instructions of the specification, the judges of the Court of Appeal ought not to have disregarded this, nor to have relied upon their own opinions that they, persons practically unacquainted with the subject, would not have been able to manufacture the article without more instructions than the specification contained.

CHAPTER VIII.

OPPOSITIONS TO THE GRANT OF PATENTS.

An inventor's application for a patent may be opposed under the eleventh section of the Patent Act of 1883, which enacts that any person may at any time within two months from the date of the advertisement of the acceptance of a complete specification, give notice at the Patent Office of opposition to the grant of the patent. The opponent is restricted to three grounds; viz., that the applicant had obtained the invention from him, or from a person of whom he is the legal representative, or (2) that the invention had been patented in this country on an application of prior date, or (3) that an examiner had reported to the Comptroller that the specification appeared to him to comprise the same invention as was comprised in a specification bearing the same or a similar title, and accompanying a previous application. Where such notice is given the comptroller will give notice of the opposition to the applicant, and will, on the expiration of those two months, after hearing the applicant and the person so giving notice, if desirous of being heard, decide on the case, but subject to appeal to the law officer. As to the procedure in cases of opposition before the Comptroller, see rules 32–41 of the Patents Rules, 1883. The notice of opposition must state the grounds of opposition. When a ground of opposition is that the invention has been previously patented, the

title, number, and date of the alleged prior specification must be duly specified. The opponent's evidence in support of his case and the applicant's evidence in reply must be in the form of statutory declarations. At the hearing before the Comptroller no matter can be gone into which has not been stated in the notice of opposition. In case of appeal to the law officer he will hear the applicant and the person giving notice if entitled, in the opinion of the law officer, to be heard in opposition to the grant, and will determine whether the grant ought or ought not to be made. The law officer may, if he thinks fit, obtain the assistance of an expert. The rules of the law officers in regard to proceedings before them in cases of appeal will be found in the appendix. The evidence used before the law officer will be the same as that used at the hearing before the Comptroller, and no further evidence can be given save as to matters which occurred or came to the knowledge of either party after the date of the decision appealed against, except with the leave of the law officer obtained on special application. The law officer may at the request of either party order the attendance at the hearing for the purpose of being cross-examined of any person who has made a declaration.

By the thirty-eighth section of the Act the law officers are empowered to examine witnesses on oath and to administer oaths for that purpose.

It would seem, from the language of the eleventh section, that, in the first instance before the Comptroller, any member of the public may oppose the grant on the second and third grounds mentioned in the first subsection, but that, in case of appeal, the law officer has power to determine whether the person opposing is entitled to be heard (subsect. 3).

When patents were sealed with the Great Seal a

petition could be presented to the Lord Chancellor against the sealing of a patent, a second opportunity for opposing the grant being thus afforded. But as patents under the new Act are sealed by the Comptroller with the seal of the Patent Office, the jurisdiction of the Lord Chancellor is impliedly taken away, and oppositions are, therefore, reduced to a single stage.

The law officers in the case of cross oppositions, one being before each of them, have sometimes sat together to hear them. This was done by *Holker, A. G.*, and *Giffard, S. G.*, in the cases of *Aulagnier's* application, No. 2578, 1876, and *Herzog's* application, No. 3285, 1876, heard December 6, 1876.

The onus of proof lies on the opponent (*Ex parte Sheffield*, L. R. 8 Ch. 237). At the hearing the parties may appear in person, or be represented by counsel, solicitors, or patent agents. On account of the numerous other engagements of the law officers, it has frequently occurred that much delay has taken place in finally disposing of the case. Moreover, their decisions have not hitherto been officially reported, and it has not been unusual to find different law officers holding different views on the same points. They are naturally averse from stopping patents, because applicants have no power of appealing from their decision. Three of the grounds, which before the new Act might have been urged against a grant can no longer be brought forward; viz., that the subject matter of the invention is not patentable; the fact of previous public user not under a prior patent; and the fact of the opponent having been in possession of the identical invention (unless he can show that it was obtained from him, or from a person whose legal representative he is). The cases on these points reported or cited in Chapter VIII. of the last edition of this work need not therefore be now referred to. The infringement of an existing

patent was formerly not considered a ground for refusing an application, for the reason that it was possible that the later invention covered a valuable improvement; but this argument cannot now be urged. If the later invention is an improvement on an invention under an existing patent, the application must be distinctly made for the improvement separate from the already patented invention; and it may be assumed that before the later inventor works the improvement, he will obtain the licence of the earlier patentee.

In cases of opposition on the ground that the examiner has reported that the specification appears to comprise the same invention as that comprised in an earlier specification with the same or a similar title (sect. 11, subsect. 1) the parties will have a right to inspect the examiner's report; but neither of the parties can see the other's specification until a complete specification has been advertised and become open to the public under sect. 10 and rule 26 of the Patents Rules, 1883. Nor, in the event of an appeal to the law officer, can the parties look to him for assistance in ascertaining the details of the respective inventions beyond such as may be approved by the report of the examiner.

For example, there was a case of opposition before *Baggallay, A. G.*, in June 1875, where the applicant had referred to a model which had been made an exhibit to one of his declarations. The Attorney-General held that as the model was used to elucidate the contents of the provisional specification, which the opponent had no right to see, neither was he entitled to see the exhibit.

Under the old system, if the law officer was at all doubtful as to the effect of the evidence before him, he would allow the patent to proceed, that the question might be tried in a court of law. In the case of *Dance's Patent* (P. M. J. vol. vi. 2nd series, 298),

Atherton, A. G. (1861) finally gave his judgment as follows:—'I allow this patent to proceed, thinking that the question of fact, whether Dance or Stevens invented, and the mixed question of fact and law, whether the invention had been made public before Dance applied for protection, admit of too much doubt to justify a law officer in stopping the patent.'

And so in other cases where much doubt hung about the matter, for example where the evidence was conflicting, and the law officer was unable to decide which side was speaking the truth, he would allow the application to proceed, as was done by *Giffard, S. G.*, May 6, 1876, in the matter of *Liddell's Patent*, No. 3872, 1875.

And in *Re Russell's Patent* (2 De G. and J. 130), where the novelty of the invention was contested, *Lord Cranworth, C.*, thought that in such a case it was better to run the risk of putting the party opposing to the costs of ulterior proceedings than to withhold the Seal, for the obvious reason that the former course, if wrong, would only create a remediable injury, whilst the latter course, if wrong, would cause an irremediable injury. (See also *Re Tolson's Patent*, 6 De G. M. and G. 422; *Re Lowe's Patent*, 25 L. J. Ch. 454; *Re Simpson and Isaac's Patent*, 21 L. T. o. s. 81. *Re Spence's Patent*, 3 De G. and J. 523.)

When two contending applicants for a patent claimed to be independent contemporaneous discoverers, the law officer usually refused to allow the grant to issue to either separately, but offered it to the two jointly. And so in a case of opposition before *Lord Cranworth, C.*, where a master and his foreman had both invented certain improvements, for which the master alone applied for a patent, but was opposed by the foreman on the ground of prior invention by the latter, the patent was ordered to be vested in trustees

for the benefit of both. (*Re Russell's Patent*, 2 De G. and J. 130.)

Where an employer opposed the application of a person who was or had been in his service, on the ground that the invention sought to be patented probably resulted from investigations or experiments directed and paid for by the employer, the law officer, being satisfied of the *bona fides* of the opposition, granted his warrant on condition that the applicant should submit his provisional specification to the inspection of the opponent, and should strike out such portions of it as contained matters of the kind referred to by the opponent. This was done by *Coleridge, S. G.*, in the case of *Healey's* application, No. 85, 1872, and also in the case of *Conniff's* application, No. 3895, 1872.

In a case where there were rival applications for a patent for the same invention, and there was a conflict of evidence as to priority of discovery, the patent was awarded by the Lord Chancellor to him who was first in a position to seal it. (*In re Lowe's Patent*, 25 L. J. N. S. 454.) But now priority of sealing will confer no advantage, inasmuch as every patent must be dated on the day of the application. By sect. 13 of the new Act a patent must now, as above stated, be dated and sealed as on the day of the application.

In cases of rival applications where the law officer was satisfied that one of the applicants was entitled to one part of the invention, whilst the other could more fairly claim another part, he issued his warrants to both, limiting the provisional specifications accordingly. This was done by *Coleridge, S. G.*, in the matter of *Craig* and *Macfarlane's* applications (P. M. J. vol. iv. 3rd series, 366). Macfarlane had applied for Letters Patent for 'Improvements in rollers for paper-making machines,' and obtained the usual provisional protec-

tion. He claimed to have invented both a 'coutch-roll' and an 'underpress roller' for a paper-making machine. The application was opposed by Craig, on the ground that he was the first inventor of an underpress roller, covered with vulcanite and vulcanised india-rubber which formed part of Macfarlane's provisional specification, and for which Craig had also applied and obtained the usual protection. Craig contended that Macfarlane, who had obtained the material for the covering of the rollers from a rubber company, was at that time in Craig's employment, and that he had only applied for his patent after the rollers had been experimented with by Craig at one of his mills, and had been found successful. Craig submitted that the experiments adduced by Macfarlane had only reference to the coutch-roll of the machine, and that Macfarlane had not proved that he had ever experimented on the underpress roller. *Coleridge, S. G.*, decided to grant his warrant for the sealing of Macfarlane's patent for the coutch-roll alone, and to grant his warrant for the sealing of Craig's patent for the underpress roller.

In the case of *Ex parte Bates and Redgate* (L. R. 3 Ch. 577) where the second applicant had procured the Great Seal without having been opposed, before the first applicant petitioned for the Seal, *Lord Hatherley, C.*, only permitted the first applicant to include in his patent so much of the invention as was not covered by the patent already sealed, and moreover, he ordered the first applicant's patent to bear date after the second applicant's.

And so, where the law officer had reported that part of an invention for which a patent was sought was the subject of an existing patent, the Lord Chancellor ordered that part to be excluded from the new patent. (*Ex parte Manceaux*, L. R. 6 Ch. 273.)

The principle of these cases was that the Crown

would not grant a second patent in derogation of a former grant, and would not assume, without *scire facias*, that the first patent was void. See *Ex parte Bailey* (L. R. 8 Ch. 61) and *Ex parte Henry* (L. R. 8 Ch. 167, 169).

The rule did not, however, apply where *mala fides* was present. Thus, where a servant having filed a provisional specification, his master afterwards filed a provisional specification for the same invention, and then a complete specification, and obtained a patent. There was grave suspicion that the master had surreptitiously obtained a knowledge of the servant's invention, and the servant's patent, notwithstanding the existence of the master's patent, was ordered to be sealed and dated as of the day of his application (*Ex parte Scott and Young*, L. R. 6 Ch. 274). The consequence of this would be that by virtue of section 24 of the Patent Law Amendment Act, 1852, acts done under the patent first sealed would be an infringement of the patent with an earlier date. (See *Saxby* v. *Hennett*, L. R. 8 Ex. 210.)

In *Ex parte Dering* (13 Ch. D. 393), where two applicants had applied on the same day for the same invention, *Lord Cairns*, *C.*, refused to follow the decision in *Ex parte Bates and Redgate* as to the post-dating of the patent, on the ground that the legislature intended patentees to have the full term of protection given by the provisional specification, and ordered the applicant's patent to be sealed, and dated as of the day of application, although the sealing was opposed by the second applicant, who had already had the Great Seal affixed.

When the opposition was founded on a prior patent granted to the opponent, and the applicant alleged that the invention for which that patent was granted had been communicated by him in confidence to the patentee

who had fraudulently obtained a patent for it, the Lord Chancellor directed the applicant's patent to be sealed, so as to give him an opportunity of trying the question in a court of law. *Re Vincent's Patent* (L. R. 2 Ch. D. 341). And see sect. 35 of the Patent Act 1883.

Where fraud could be made out, or where it was shown that the applicant had derived the principle of the invention from a rival applicant, the Seal would be refused to the former.

In April, 1853, Hadden made application for a patent for a method of making gun-cartridges. His plan obviated the necessity of biting off the end of the cartridge when the gun was being loaded, and its main feature consisted in making it weaker at one end, so that when rammed down it burst open and the powder ran into the breech of the gun. After lodging the provisional specification, Hadden had some conversation with Lott, to whom he described the general features of the invention. Shortly afterwards Lott applied for a patent for an invention having a similar object, and his specification described a collapsing chamber in the cartridge to hold the charge of powder, which chamber would be burst open by the action of the ramrod. This method of carrying out the general idea was different from the one adopted by Hadden. The Solicitor-General, having issued his warrant for the sealing of Lott's patent, the case was carried before the Lord Chancellor, who held that the two inventions were substantially the same, the material part in each being that one end of the cartridge was made weaker than the other with a view to its bursting under the action of the ramrod. Holding that Lott had obtained this idea from Hadden, the Chancellor refused to seal Lott's patent.

Herschell, S. G., in the case of Macfarlane's Patent (March 1883), opposed by the Animal Charcoal Company Limited, declined to issue the warrant under the following circumstances. Macfarlane was manager of the company and Jones was a consulting engineer, and Ingham a chemist also employed by the company. It was alleged that Macfarlane was not the inventor of his alleged invention, but that it consisted partly of suggestions made by Jones and partly of suggestions made by Ingham, all of which had been experimented upon in the company's works under Macfarlane's management. Although Macfarlane showed at the hearing that he had obtained an American patent for his alleged invention in his own name during the pending of the opposition, the law officer, believing that the suggestions had been originally made by Jones and Ingham, declined to grant the patent.

In the case of Abel's application, No. 1908, 1876, opposed by De Muller, August 2, 1876, *Giffard, S. G.*, held that he could not take any official notice of alleged fraudulent proceedings on the part of the foreign communicator of Abel's invention as against the opponent, which took place abroad. He could not look behind the applicant Abel, who, as the first importer or introducer of the invention into Her Majesty's realm, was in law the inventor.

Under the old system, an appeal from the law officer's decision would not be allowed unless a case of surprise or fraud could be made, or unless some material fact which, if brought before the law officer would have led him to decide differently, had come subsequently to the knowledge of the party appealing. (*Re Vincent's Patent*, L. R. 2 Ch. 341; *Re Simpson's Patent*, 21 L. T. o.s. 81; *Ex parte Sheffield*, L. R. 8 Ch. 237.) Nor would the opponent be allowed to raise on those facts before the Lord Chancellor a new argu-

ment which he omitted to raise before the law officer. (*Ex parte Sheffield*, L. R. 8 Ch. 237.)

COSTS.

The Comptroller appears to have no authority to award costs; but the law officers have power, under the 38th sect. of the Act of 1883, to order costs to be paid by either party, and any such order may be made a rule of court. The law officers, however, have no settled rules as to costs, and appear disposed to limit the allowance of costs as much as possible. It is to be hoped that in any future legislation power will be given to the Comptroller to deal with costs of oppositions. There seems to be no ground why applicants should have to bear their own costs of frivolous and unsuccessful oppositions.

CHAPTER IX.

THE PATENT: ITS DATE, DURATION, AND EXTENT.

By the twelfth section of the Patent Act of 1883 it is enacted that if there is no opposition to the grant of a patent, or in case of opposition if the determination is in favour of the grant, the Comptroller shall cause a patent to be sealed with the seal of the Patent Office, and a patent so sealed shall have the same effect as if it were sealed with the Great Seal of the United Kingdom. It is further directed that a patent shall be sealed as soon as may be, and not after the expiration of fifteen months from the date of application, except (1) where the sealing has been delayed by an appeal to the law officer, or by opposition to the grant, in which case the patent may be sealed at such time as the law officer may direct; and (2) if the applicant should die before the expiration of the fifteen months, in which case the patent may be granted to his legal representative, and sealed at any time within twelve months of the applicant's death.

By the thirteenth section of the same Act it is directed that every patent shall be dated and sealed as of the day of the application. The same section provides that in case of more than one application for a patent for the same invention, the sealing of a patent on one of those applications shall not prevent the sealing of a patent on an earlier application. This proviso was intended to apply to such cases as *Ex parte Bates & Redgate* (L. R. 3 Ch. 577) and *Ex parte Manceaux*

(L. R. 6 Ch. D. 274), both before Lord Hatherley. In the former of these cases he decided that a second applicant who had sealed his patent was entitled to hold it against all the world, including the first applicant for the same invention, who was later in applying for the seal. And the judge ordered the first applicant's patent to be dated after the patent of the second applicant.

In the event of the death of an applicant for a patent before the sealing of the patent, it may be granted, under section 12 subsection (3 *b*) of the new Act, to his legal representative, and sealed at any time within twelve months after the death of the applicant. In such a case application must be made to the Comptroller, who will require to be furnished with an official copy of or extract from the will or letters of administration, in proof of the applicant's title as legal representative.

By the eighty-sixth section of the Patent Act of 1883 the Comptroller may refuse to grant a patent for an invention, the use of which would, in his opinion, be contrary to law or morality.

The sixteenth section of the Act of 1883 directs that every patent when sealed shall have effect throughout the United Kingdom and the Isle of Man, leaving out the Channel Islands, which have hitherto been included.

The duration of every patent is by the seventeenth section of the Act of 1883 directed to be limited therein to fourteen years from its date. According to the case of *Russell* v. *Ledsam* (14 M. & W. 574) the time runs from the day of the date of the patent, including that day: for instance, a patent for fourteen years, dated February 26, 1825, was held to expire at twelve o'clock on the night of February 25, 1839. As to the mode of obtaining an extension of the term, and the princi-

ples which guide the Privy Council in deciding upon the application, the reader is referred to Chapter XI.

By the thirty-third section of the new Act every patent may be in the form set forth in the first schedule, but this form the Board of Trade has power, under the 101st section subsection 2, to alter or amend. Further, by the thirty-third section a patent is to be granted for one invention only, but no objection to a patent can be taken in an action or other proceeding on the ground that it comprises more than one invention.

On reference to the form of patent printed in the Appendix to this volume it will be seen that the Crown grants unto A. B. especial licence, full power, sole privilege and authority, that he, the said patentee by himself, his agents or licensees, from time to time, and at all times thereafter during the term of years thereinafter expressed (viz. fourteen years), may make, use, exercise, and vend his invention within the United Kingdom of Great Britain and Ireland, and Isle of Man, in such manner as to him or them shall in his or their discretion seem meet; and that the said patentee shall have and enjoy the whole profit, benefit, commodity, and advantage from time to time accruing, by reason of the said invention, during the term of fourteen years from the date. Then all the Queen's subjects whatsoever are strictly commanded not to infringe the patent. It is, however, provided that, if it shall be made to appear to the Crown or the Privy Council that the grant is contrary to law, or prejudicial or inconvenient to the subjects of the realm in general, or that the invention is not a new invention as to the public use and exercise thereof within the United Kingdom, &c., or that the said patentee is not the first and true inventor thereof within the realm, the patent shall be void.

There are also other provisoes, the two most im-

portant of which make the grant void—first, if the said patentee shall not pay all fees by law required to be paid in respect of the patent or in respect of any matter relating thereto at the time or times and in manner for the time being by law provided; and second, if the said patentee shall not supply or cause to be supplied for the service of the Crown all such articles of the said invention as may be required by the officers or commissioners administering any department of the service in such manner, at such times, and at and upon such reasonable prices and terms as shall be settled in manner for the time being by law provided.

By the operation of the seventeenth section of the Patent Act of 1883 every patent will cease if the patentee fails to make the prescribed payments within the prescribed times. The twenty-fourth section refers to the second schedule as setting forth the fees which are payable by patentees, and the first schedule of the Patents Rules 1883 again sets forth the fees. We there find that 50*l.* must be paid before the end of four years from the date of the patent on a certificate of renewal; and a further sum of 100*l.* on a second certificate of renewal before the end of seven years, or, in the case of patents granted under the new Act, before the end of eight years from the date of the patent. But a patentee has the option of paying, instead of these sums of 50*l.* and 100*l.*, the annual sum of 10*l.*, before the ends of the fourth, fifth, sixth, and seventh years, the annual sum of 15*l.* before the ends of the eighth and ninth years, and the annual sum of 20*l.* before the ends of the tenth, eleventh, twelfth, and thirteenth years respectively. As to the procedure in regard to certificates of payment or renewal see rules 42–45 of the Patents Rules 1883.

It is, however, provided by the seventeenth section of the new Act that if in any case, by accident, mistake,

or inadvertence, a patentee fails to make any prescribed payment within the prescribed time, he may apply to the Comptroller for an enlargement of the time for making that payment; and thereupon the Comptroller shall, if satisfied that the failure has arisen from any of the above-mentioned causes, on receipt of the prescribed fee for enlargement, not exceeding ten pounds, enlarge the time accordingly, but not for more than three months. (As to the procedure see rule 46 of the Patents Rules 1883.) It is further provided that if any proceeding shall be taken in respect of an infringement of the patent committed after a failure to make any payment within the prescribed time, and before the enlargement thereof, the Court before which the proceeding is proposed to be taken may, if it shall think fit, refuse to award or give any damages in respect of such infringement.

In the case of *Williams* v. *Nash* (28 Bea. 93) it was held that a payment on the third anniversary of the date was a sufficient compliance with the statute which prescribed the payment of a stamp duty of 50*l.* *before the expiration* of the third year. The patent was dated on February 26, 1855, and the third year's stamp duty was paid on February 26, 1858.

Under the ninety-eighth section of the new Act whenever the last day for paying a fee at the Patent Office shall happen to fall on Christmas day, Good Friday, or on a Saturday or Sunday or on a day observed as a holiday at the Bank of England, or on any day observed as a public fast or thanksgiving, the fee may be paid on the day next following any of these days.

Where through inadvertence the stamp duty has not been paid within the extended time, and the patent has consequently become void, nothing short of a special Act of Parliament can restore its validity.

In case clerical errors should have been made in letters patent, the Master of the Rolls had and still has power to correct them (*Re Nickels' Patent*, 4 Bea. 563; *Re Gare's Patent*, April 5, 1884); but the application must be made within a reasonable time (*Re Blamond's Patent*, 3 L. T. N. S. 800). In the case of *Adam's Patent* (1 W. R. 259), a doubt having been expressed as to the jurisdiction of the Master of the Rolls, the order was made by the Lord Chancellor. But now, the powers of amendment given to the Comptroller by sect. 18 of the Patents Act, 1883, seem extensive enough to cover clerical errors in patents.

In the event of a patent being lost or destroyed, or if its non-production should be accounted for to the satisfaction of the Comptroller, he is empowered by the thirty-seventh section of the new Act to cause a duplicate thereof to be sealed.

In the case of *Feather* v. *The Queen* (6 B. & S. 257) it was decided that the Crown has a right to the free use of any patented invention (see the case more fully stated at the end of the chapter on Infringements); and this decision applies to all patents granted before the commencement of the Act of 1883, or on applications then pending; but as to patents granted afterwards, they will have the same effect against the Crown as against a subject (sect. 27). The officers or authorities administering any department of the service of the Crown, their agents, contractors, or others, are to be entitled to use any invention for the service of the Crown on terms to be agreed upon with the approval of the Treasury; or if an agreement cannot be effected, then on such terms as the Treasury, after hearing all parties interested, shall settle.

By the forty-fourth section of the Patent Act of 1883 the Secretary of State for War is empowered to acquire by purchase or gift the benefit of any inven-

tions of improvements in munitions of war, and of any patent obtained for the same, and to prevent the disclosure of such inventions.

The effect of the forty-fifth section is that patents issued or applied for before the commencement of the Act will not have the benefit of the provision binding the Crown, nor will they come under the liability imposed by the clauses relating to compulsory licences. But in all other respects, including the amount and time of payment of fees and the proceedings for amendments, prolongations, and revocations, the new Act will extend to patents granted before the commencement of the Act, or on applications then pending, except that if the patent is three years old the 100*l.* duty cannot be paid by instalments.

By the thirty-fifth section of the new Act a patent granted to the true and first inventor is not to be invalidated by an application in fraud of him, or by provisional protection obtained thereon, or by any use or publication of the invention, subsequent to that fraudulent application during the period of provisional protection.

The 113th section of the Patent Act of 1883 repeals all the statutes described in the third schedule of the Act, but goes on to enact that the repeal shall not affect the *past operation* of any of those statutes. Now, the twenty-fifth section of the Patent Act of 1852 declares that any British patent which bears date after a foreign patent for the same invention (being a foreign invention) shall be void at the expiration of such foreign patent. Consequently, any British patent granted before the commencement of the new Act, and standing in this relation to a foreign patent, will be void by the operation of these two clauses, in case the foreign patent shall have expired before the commencement of the new Act. That is to say, since the earlier Act has

already rendered the British patent void, that 'past operation' of the Act will not be affected by its repeal by the Act of 1883. But if the twenty-fifth section of the earlier Act at the time of its repeal has not had any invalidating operation on a patent, then the British patent will not be touched, and the clause in question will have no effect. As regards patents which have been obtained on applications pending at the commencement of the new Act, it is presumed that the third subsection of the forty-fifth section of that Act will effectually protect them from the operation of the twenty-fifth section of the Act of 1852.

It has been held by Baron Huddleston in the case of *Nordenfeldt* v. *Gardner* (R. P. C. vol. i. p. 10) that an order to invalidate a British patent on the ground of the invention being a foreign invention for which a Belgian patent had been obtained prior to the date of the British patent and had lapsed, the foreign patent must have been not merely applied for, but actually obtained before the British patent, and this, although the foreign patent when granted actually bore a date earlier than that of the British patent.

When a patent is granted to two or more persons, each may use the invention without being liable to account to the other (*Mathers* v. *Green*, 1 Law Rep. Ch. Ap. 29, before *Lord Cranworth, C.*). See, however, the earlier case of *Hancock* v. *Bewley* (Johns. 601), as to the rights of parties where letters patent are vested in trustees for two or more persons as tenants in common.

In case of the death of the patentee intestate before the expiration of the patent, his interest under it passes to his personal representatives, and not to his heir.

CHAPTER X.

AMENDMENTS OF SPECIFICATIONS.

It has been shown in Chapter III., that where a material part of an alleged invention is not new or not useful, the patent is altogether invalid; and that if a patentee claims by his specification more than he is entitled to, the patent is likewise void (see Chapter VII.). The fatal effect of an inconsistency between the title and the specification (Chapter V.), or between the provisional and the complete specification, has also been pointed out (Chapter VII.). To remedy a law which in many cases bore unjustly upon patentees, the Act of 5 and 6 Wm. IV. c. 83, empowered a patentee to take steps for altering his specification by disclaimer. That Act, however, as well as other Acts relating to disclaimers, were repealed by the Patent Act of 1883, which substituted the following provisions for those of previous statutes. By the eighteenth section it is enacted that—

(1) An applicant or a patentee may from time to time, by request in writing left at the Patent Office, seek leave to amend his specification, including drawings forming part thereof, by way of disclaimer, correction, or explanation, stating the nature of such amendment, and his reasons for the same.

(2) The request and the nature of such proposed amendment shall be advertised in the prescribed manner, and at any time within one month from its

first advertisement any person may give notice at the Patent Office of opposition to the amendment.

(3) Where such notice is given the Comptroller shall give notice of the opposition to the person making the request, and shall hear and decide the case subject to an appeal to the law officer.

(4) The law officer shall, if required, hear the person making the request and the person so giving notice, and being in the opinion of the law officer entitled to be heard in opposition to the request, and shall determine whether and subject to what conditions, if any, the amendment ought to be allowed.

(5) Where no notice of opposition is given, or the person so giving notice does not appear, the Comptroller shall determine whether and subject to what conditions, if any, the amendment ought to be allowed.

(6) When leave to amend is refused by the Comptroller, the person making the request may appeal from his decision to the law officer.

(7) The law officer shall, if required, hear the person making the request and the Comptroller, and may make an order determining whether and subject to what conditions, if any, the amendment ought to be allowed.

(8) No amendment shall be allowed that would make the specification, as amended, claim an invention substantially larger than or substantially different from the invention claimed by the specification as it stood before amendment.

(9) Leave to amend shall be conclusive as to the right of the party to make the amendment allowed, except in case of fraud; and the amendment shall in all courts and for all purposes be deemed to form part of the specification.

(10) The foregoing provisions of this section do not apply when and so long as any action for infringement

or other legal proceeding in relation to a patent is pending.

The procedure on applications for amendments is regulated by Rules 48–56 of the Patents Rules 1883 and by the Law Officers Rules which will be found in the Appendix. The law officers have now power to examine witnesses on oath (sect. 38).

By the nineteenth section it is enacted that in an action for infringement of a patent, and in a proceeding for revocation of a patent, the Court or a judge may at any time order that the patentee shall, subject to such terms as to costs and otherwise as the Court or a judge may impose, be at liberty to apply at the Patent Office for leave to amend his specification by way of disclaimer, and may direct that in the meantime the trial or hearing of the action shall be postponed. The Court of Appeal in *Singer* v. *Stassën* (1 R. P. C. 122), held that liberty to apply for disclaimer during action should be given upon the terms that the costs of the amendment should be the defendants', and that the specification, as amended, should not be receivable in evidence in the action; and in *Codd* v. *Bratby* (1 R. P. C. 209), *Mr. Justice Chitty* held that leave to amend should be given upon the terms that the specification when amended should not be given in evidence at the trial, and that no evidence of infringement should be given prior to the date of filing the amended specification.

The twenty-first section directs that every amendment of a specification shall be advertised. This will be done by the Comptroller under Rule 56.

There is no appeal from the order of the law officer when he grants or refuses leave to amend on the appeal to him from the decision of the Comptroller.

It had become a common but not invariable practice under the old law for the law officers, on applica-

tions for leave to amend specifications under the Act of 5 & 6 Wm. IV., to impose as a condition that no action for an infringement should be brought either against certain persons or against any of the public, before the date of the disclaimer.

The judges of the Court of Queen's Bench having decided, in the case of *Holmes* v. *London and North-Western Railway Company*, that a patent for an improved turn-table for railway purposes was invalid, because the specification was construed as claiming not only the combination but also the several parts, some of which were old, the assignee of the patent applied to the Solicitor-General for leave to enter a disclaimer of the separate parts of the turn-table, so as to confine the claim to the combination of parts forming the whole apparatus. The Solicitor-General (1853), after hearing counsel in opposition, as well as for the applicant, granted the leave sought for, upon the terms of the applicant undertaking not to bring or prosecute any action or suit against certain parties, in respect of any turn-tables made or used by them before the date of the disclaimer. (Macr. P. C. 31.) See also in the matter of *Smith's Patent* (Macr. P. C. 232).

In *Re Tranter's Patent* of 1865, which was a patent for fire-arms and cartridges, an application was made in August 1873, by the assignees of the patent for leave to disclaim certain portions of the matters claimed in the specification, and the application was opposed by manufacturers of fire-arms and cartridges chiefly on the ground that they had embarked large capital in the manufacture of cartridges, and that they ought to be protected in their manufacture against any proceedings on the part of proprietors of a patent which had been allowed to remain in its imperfect state for such a long time, inasmuch as the effect of the disclaimer would be to enable the applicants to take such proceedings.

Coleridge, A. G., granted the leave sought for on the condition that the applicants 'should undertake that no legal proceedings be taken against the opponents in respect of the manufacture, use, or sale of cartridges, or for any alleged infringement of the patent in question when amended by disclaimer.' And this decision was followed by *Giffard, S. G.*, in the case of *Re Jones's Patent*, on the application of Mr. Batley, the assignee, for similar leave.

On an application for leave to disclaim parts of the specification under *Crabtree's Patent* No. 2775 of 1878, *James, A. G.*, Feb. 12, 1881, allowed the application upon terms that no action should be brought against any person in respect of any machine which had prior to the hearing been made or sold by any of the opponents. He directed that lists of such machines should be supplied and verified if required by statutory declaration.

The principle of these cases received considerable extension in *Re Medlock's Patent* (Newton's L. J. N. S. vol. xxii. p. 69). That was an application for leave to enter a disclaimer of part of a specification under a patent for preparing a red or purple dye by treating aniline with dry arsenic acid. The patent had been the subject of considerable litigation, which had resulted in its being declared invalid on the ground that, of the two alternative processes described in the specification, confessedly only one would answer (see *Simpson* v. *Holliday*, 13 W. R. 577, cited *ante*). The application was opposed by several chemical manufacturers, some of whom had been made defendants in the various suits instituted by the owners of the patent. *Collier, S. G.*, would only consent to grant the leave sought for on the terms that the applicants should bring no action against the opposers 'for any infringement of the patent by the use or continued use, *during the continuance of*

the patent, of any processes for manufacturing red and purple dyes *in use by them at the present time.*' The applicants refused to accept this condition, and the Solicitor-General consequently disallowed the disclaimer.

The law officer, however, did not always insist upon the patentee giving an undertaking of this nature. It was sometimes thought right that he should be at liberty to seek compensation for the past infringement of the patent (*Re Lucas's Patent*, Macr. P. C. 234).

We have seen that under the eighth sub-section of the eighteenth section of the new Act 'no amendment shall be allowed that would make the specification as amended claim an invention substantially larger than or substantially different from the invention claimed by the specification as it stood before the amendment.' The first section of the earlier Act (5 and 6 Wm. IV. c. 83), now repealed, under which disclaimers were first authorised, disallowed such 'as shall extend the exclusive right granted by the letters patent.'

In the matter of *Bateman and Moore's Patent* (Macr. P. C. 116), an application was made (1854) to *Bethell, S. G.*, for leave to alter the specification, so as to make it disclaim the separate parts of the invention, and claim only the combination. The Solicitor-General said, that he should require to see from the specification itself that it had not been intended to claim the separate parts, but their combination only. Finding some indication of an intention to claim the apparatus as a whole, he gave the patentees permission to reject certain words in the claiming part of the specification which were inconsistent with such a construction.

Several cases came before the courts in which the construction of the prohibitive words of the earlier Act was debated. 'The object of the Act authorising disclaimers' (said *Lord Westbury* in the case of *Ralston*

v. *Smith*, 11 H. L. C. 223) 'was plainly this, that when you have in your specification a sufficient and good description of a useful invention, but that description is imperilled or hazarded by something being annexed to it which is capable of being severed, leaving the original description in its integrity good and sufficient, without the necessity of addition, then you may, by the operation of a disclaimer, lop off the vicious matter, and leave the original invention, as described in the specification, untainted and uninjured by that vicious excess.'

The language of the old Act was always construed as limiting the amending power to the operation of cutting out peccant matter, but power to correct and explain is expressly given by the new Act.

It will be part of the duty of the Comptroller and the law officers, when hearing applications for leave to amend, to see that the proposed amendment does not extend the scope of the patent, or alter the claims in such a way that the invention would become something substantially larger or substantially different from what it was originally.

Where a specification claims both a combination and some of the parts, a disclaimer may sever and reject the claim either to the combination or to any of the parts. But a specification cannot be altered so as to be made to claim a combination or parts if they were not previously claimed. Nor will a disclaimer be good which attempts to make a specification cover an invention different from that originally specified. For example, where a patent has been obtained for a combination of three parts, and it is found that one of them is useless, a patentee is not entitled to disclaim that one with a view of covering a combination of two parts, inasmuch as that would be an invention different from the one for which he had taken out his patent.

The operation of a disclaimer was considered in the case of *Seed* v. *Higgins* (8 E. & B. 755). The patentee described in his specification, and illustrated by drawings, some machinery for preparing cotton, and after saying that the apparatus so described represented one practicable mode of carrying out the invention, he proceeded to state that he did not intend to confine himself to this particular method, but claimed as his invention the application of the law or principle of centrifugal force for a certain purpose. He afterwards disclaimed his claim to the application of the law or principle, and limited his claim to the application of centrifugal force acting in a certain manner as described in the specification. This was held to be a limitation of his claim to the particular apparatus described, whereby the principle was applied in a certain way, and afforded no ground for contending that the disclaimer described a different invention from that described in the specification. This view was also taken on appeal by the Court of Exchequer Chamber (8 E. & B. 771) and by the House of Lords (8 H. L. C. 550).

The prohibitive words in the first section of the Act of William IV. were held to apply to all cases where the disclaimer attempted to give the patentee a right which he could not have enjoyed under the specification as originally framed. Thus in the case of *Ralston* v. *Smith* (11 C. B. N. S. 471) it was decided by the Court of Exchequer Chamber, and afterwards by the House of Lords (11 H. L. C. 223), that a disclaimer is bad which is in effect an attempt to turn a specification for an impracticable generality into a grant for a specific process, comprised within the generality in one sense, but not to be discovered there without going through the same course of experiment which led to the discovery of the specific process in the

disclaimer. The specification in this case was expressed in general terms, embracing a great number of modes of engraving upon rollers any desired design for the purpose of embossing woven fabrics. It was afterwards found that only rollers with circular grooves would answer, and the patentee thereupon, by disclaimer, limited his invention to such rollers. 'Now' (said *Lord Chelmsford*), 'as these were not specifically described in the original specification, but were merely involved in the general terms which were used, the patentee had not complied with the conditions of the letters patent in particularly describing and ascertaining the nature of his invention. When, therefore, by his disclaimer he confines his claim to circular grooved rollers as his sole invention, though in one sense he may be said to narrow a right, yet he really extends it, because he thereby describes his alleged invention sufficiently to enable him now to assert a right under the patent which he never could have successfully maintained upon the original specification alone.

Other decisions as to disclaimers under the old law were *Cannington* v. *Nuttall* (L. R. 5 H. L. 205) and *Dudgeon* v. *Thomson* (L. R. 3 A. C. 34).

It seems, from the case of *Thomas* v. *Welch* (L. R. 1 C. P. 192), that all the claims might under the old law be struck out by disclaimer, provided that there was enough left in the specification to show distinctly what was the invention sought to be protected.

Under that part of the Act of 5 and 6 William IV. c. 83, which enacts that 'no objection shall be made, in any proceeding whatsoever, on the ground that the party making such disclaimer or memorandum of alteration had not such authority in that behalf,' it was held that the disclaimer of a patentee who had assigned all his interest in the patent could not be objected to (*Wallington* v. *Dale*, 7 Exch. 888). The language of the

new Act, as we have seen above, is that 'leave to amend shall be conclusive as to the right of the party to make the amendment allowed except in case of fraud.'

The Master of the Rolls may without bill filed order a disclaimer to be removed from the file, when filed without the consent of the patentee (*Re Berdan's Patent*, L. R. 20 Eq. 346).

The M. R. refused to cancel a memorandum of alteration made under 5 and 6 William IV. c. 83, when application was made to him for that purpose, on the ground that it extended the patentee's privilege and infringed the petitioner's patent rights, for he held he had no jurisdiction (*Re Sharp's Patent*, 3 Beav. 245).

The twentieth section of the Act of 1883 directs that where an amendment by way of disclaimer, correction, or explanation has been allowed under that Act no damages shall be given in any action in respect of the use of the invention before the amendment, unless the patentee establish to the satisfaction of the Court that his original claim was framed in good faith, and with reasonable skill and knowledge.

To amend clerical errors in a specification application must be made to the Master of the Rolls or the Comptroller as before stated.

The following cases decided by the Lord Chancellor or Master of the Rolls relate to the amendment of clerical errors under the old law: *Re Sharp's Patent* (3 Beav. 245); *Re Redmund* (5 Russ. 44); *Re Ruberry's Patent* (1 W. P. C. 649); *Re Dismore* (18 Beav. 538); *Re Johnson's Patent* (L. R. 5 Ch. D. 503).

If a patentee should enter a disclaimer after he has obtained an injunction against an infringer, he is no longer entitled to enforce the injunction, but must proceed *de novo* against the infringer (*Dudgeon* v. *Thomson*, L. R. 3 App. Ca. 34).

An order having been obtained to amend a specification during the progress of an action, subject only to the payment of the costs by the plaintiff, application was made to the Comptroller, and the Comptroller gave leave to amend as proposed without imposing any conditions. On appeal to the law officer, *Herschell, S. G.*, he held that the leave should be made subject to the condition that no action should be brought or proceeding taken in respect of any infringement prior to the 1st January 1884, but without prejudice to any question in the pending action. The law officer stated during the argument that the Attorney General and he were of opinion that the Comptroller, as well as the law officer, had power to impose conditions on giving liberty to amend a specification by way of disclaimer (*Re Hearson's Patent*, R. P. C. 214).

COSTS.

The law officer is empowered by the thirty-eighth section of the Patent Act of 1883 to order costs to be paid by either party, and any such order may be made a rule of Court. But the Act does not authorise the Comptroller to award costs.

CHAPTER XI.

EXTENSION OR PROLONGATION OF LETTERS PATENT.

NOTWITHSTANDING the merit and utility of his invention, a patentee frequently finds himself nearly at the expiration of the term for which his patent was granted, without having reaped the reward which he was fairly entitled to expect. This may have happened from various causes. To perfect the invention, to work it out, and to bring it before the public, may have been attended with great expenses, which were never repaid. It sometimes occurs that the public are slow to acknowledge the merit of an invention of real value, and the patentee's privilege is on the point of expiring before they can be brought to extend their patronage to it. It may be that the patentee's monopoly has been infringed, and that much time has been lost and large costs have been incurred in enforcing or defending his just rights. Or it may be that the patentee did not himself possess sufficient means, and was never fortunate enough to meet with a capitalist to advance what was necessary to work the invention. From some one of these causes, or from several of them combined, it occurs frequently that a patentee fails to derive any benefit, even if he escapes loss, from an invention of sterling merit and utility.

In order to afford the unsuccessful but meritorious patentee an opportunity of remedying this hardship at a less cost than a special Act of Parliament, the statute of 5 and 6 William IV. c. 83, empowered him to petition

the Queen in Council for a prolongation of the term of his patent; and now by the twenty-fifth section of the Patent Act of 1883 it has been enacted that a patentee may, after advertising in manner directed by any rules made under this section his intention to do so, present a petition to her Majesty in Council, praying that his patent may be extended for a further term; but such petition must be presented at least six months before the time limited for the expiration of the patent.[1] Any person may enter a caveat, addressed to the Registrar of the Council at the Council Office, against the extension. If her Majesty shall be pleased to refer any such petition to the Judicial Committee of the Privy Council, the committee shall consider the same, and the petitioner and any person who has entered a caveat shall be entitled to be heard on the petition. The Judicial Committee are to have regard to the nature and merits of the invention in relation to the public, to the profits made by the patentee as such, and to all the circumstances of the case. If they report that the patentee has been inadequately remunerated, her Majesty in Council may extend the term of the patent for seven, or in exceptional cases fourteen, years; or may order the grant of a new patent for the term therein mentioned, and containing any restrictions, conditions, and provisions that the Judicial Committee may think fit.

An assignee may apply for an extension, but he does not stand altogether in the same favourable position as the patentee. It is chiefly with the view of rewarding a meritorious inventor that the extension of a patent is granted. If, however, the assignee be a person who has assisted the inventor with funds to

[1] In the case of Brandon's patent (1 R. P. C. 154), it was held that owners of patents existing before 1st January 1884 could apply for prolongations at any time before the expiration of such patents

enable him to perfect the invention and bring it into use, this circumstance is a favourable feature in a petitioning assignee's case (*Norton's Patent*, 1 Moore, P. C. C. N. S. 339, in which case the petitioners, who were a public company, were refused a prolongation which they applied for after the death of the inventor). See also the cases of *Cardwell's Patent* (10 Moo. P. C. C. 488); *Napier's Patent* (13 Moore, P. C. C. 543); *Pitman's Patent* (8 Moo. P. C. C. N. S. 297); *Hutchison's Patent* (14 Moo. P. C. C. 364); *Normand's Patent* (L. R. 3 P. C. C. 193); *Reece's Patent*, 'Engineer,' March 1881.

PROCEDURE.

The proceedings commence by the insertion of advertisements in the public prints, giving notice of the patentee's intention to apply for a prolongation of his patent, and a petition setting forth the facts must then be presented to her Majesty in Council, six months before the time limited for the expiration of the patent.

All facts material to the petitioner's title must be stated in the petition (*Johnson's Patent*, L. R. 4 P. C. C. 83). In one case, when such facts were omitted, the hearing was postponed, and the petition directed to be amended (*Hutchison's Patent*, 14 Moore, P. C. C. 364). In another case, where important facts were not set forth, the application was refused (*Pitman's Patent*, 8 Moore, P. C. C. N. S. 293). Where the patentee had assigned his patent before applying for an extension, and had omitted to state this fact in his petition, it was dismissed, leaving the inventor or his assignee if he thought proper to apply again (*Mitchell's Patent*, February 1882).

If foreign patents have been obtained, the fact should be mentioned (*Pitman's Patent*, L. R. 4 P. C. 86; *Adair's Patent*, 6 App. Cas. 176). Important

facts having been inadvertently omitted from the petition, leave was applied for and granted to file supplementary particulars before the hearing (*In Re Reece's Patent*, 'Engineer,' February 1881).

Any person may enter a caveat addressed to the Registrar at the Council Office against the extension. Having done so, he is entitled to have notice from the petitioner of the hearing, and may be heard in opposition, where the case is entered upon, before the Judicial Committee (*Lowe's Patent*, 8 Moore, P. C. C. 1). As to the right of an alien living abroad to be heard in opposition to an extension, see *Schlumberger's Patent* (9 Moore P. C. C. 1).

By the sixth of the Privy Council Rules persons who have entered caveats must within a fortnight after service on them of copies of the petition lodge at the Council Office notice of the grounds of their objection. In *Ball's Patent* (4 App. Ca. 171) it was held to be unnecessary to state the particulars if the grounds are given.

By the ninth rule the petitioner must lodge at the Privy Council Office at least one week before the day fixed for the hearing, six printed copies of his specification, and also four copies of his accounts. If the accounts are not filed in due time the Committee may refuse to go into the question (*Johnson's and Atkinson's Patents*, L. R. 5 P. C. 87; *Chatwood's Patent*, L. R. 5 P. C. 88, note).

Under the eighth section of the 7 and 8 Vict. c. 69, the Judicial Committee may appoint one of the clerks of the Privy Council to take any formal proofs required to be taken in dealing with the matter before them, and may proceed on the clerk's report as if the proofs had been taken by the Committee itself; and this section was not repealed by the Patent Act of 1883. By the sixth sub-section of the twenty-fifth section of that Act

it was enacted that her Majesty in Council might make, from time to time, rules of procedure and practice for regulating proceedings on such petitions, and subject thereto such proceedings should be regulated according to the existing procedure and practice in patent matters of the Judicial Committee. The rules now in force will be found reprinted in the Appendix to this volume.

THE HEARING.

The Judicial Committee of the Privy Council is empowered by the twenty-eighth section (subsection 2) of the new Act to call in the aid of an assessor, specially qualified in any proceeding before them relating to patents.

Not more than two barristers will be heard on each side; that is to say, two in support of the applicant's case, and two in opposition. Where, however, more parties than one oppose, and they have separate and independent grounds of opposition, each will be allowed two counsel. The Attorney General usually appears to watch the case on behalf of the Crown.

The petitioner must be prepared at the hearing with evidence to show that there is an invention; that the invention possesses utility and is a benefit to the public; that all reasonable means had been taken to make the invention productive; and if his case is that he has never been reimbursed his expenses, he must give reasonable evidence of the amount of his loss. If, however, there is a balance of profit, but to an extent incommensurate with his fair expectations, he will be required to show what the real profit has been. 'It is the duty of a patentee to take upon himself the onus of satisfying the Committee in a manner which admits of no controversy of what has been the amount of remuneration which in every point

of view the invention has brought to him, in order that their lordships may be able to come to a conclusion whether that remuneration may fairly be considered a sufficient reward for his invention or not. It is not for the Committee to send back the accounts for further particulars, nor to dissect the accounts for the purpose of surmising what may be their real outcome if they were differently cast; it is for the applicant to bring his accounts before the committee in a shape which will leave no doubt as to what the remuneration has been that he has received.' (*Per Lord Cairns* in *Re Saxby's Patent*, L. R. 3 P. C. 292; *S. C.* 7 Moore, P. C. C. N. S. 85. See also *Re Clark's Patent*, L. R. 3 P. C. C. 421; *S. C.* 7 Moore, P. C. C. N. S. 255; *Wield's Patent*, L. R. 4 P. C. C. 89.) The accounts must, therefore, be clear, unreserved, and properly proved (*Hills' Patent*, 1 Moore, P. C C. N. S. 258). It is desirable that a patentee should from the first keep his accounts under the patent distinct from those of any other business in which he may be engaged, so that in the event of his applying for an extension, he may be able to give satisfactory evidence of everything paid and received on account of the patent. (*Betts' Patent*, 1 Moo. P. C. N. S. 49).

The profits of every branch of the manufacture connected with the patented invention must be set forth. On the hearing of the petition for a prolongation of *Newton's Patent*, March 1881, it appeared that the petitioners (Nobel's Explosives Company), who were assignees, had not only manufactured dynamite, the object of the patent, but had also made nitro-glycerine (one of the ingredients of dynamite) and the nitric acid with which that nitro-glycerine was prepared. In making out their accounts in support of their case they treated the matter as if they had bought nitro-glycerine in the market, keeping out of view the profits they

had made by the manufacture of nitric acid and nitro-glycerine; their contention being that the latter profits ought not to be taken into consideration in estimating the dynamite profits. It was, however, held that the profits from every branch of their manufacture must be brought into the account; and as the profits derived from the subsidiary manufacture had been very large, the petition was dismissed with costs.

It is to be observed, however, that the Act of 1883, sect. 25, subsect. 4, directs the Judicial Committee in considering their decision to have regard to 'the profits made by the patentee as such.' These words may possibly be considered as an instruction to the Committee not to take into account the profits made by an independent business carried on by the patentee, notwithstanding that the produce of that business is used as a feeder of the patented manufacture. It may be argued that since the subsidiary business requires its own capital, management, and labour, incurs its own trade risks, and is open to public competition, its conductor ought to enjoy the profits thereof without being called on to bring them into the account of the profits made under the patent. That business might have been carried on by any other person without infringing the patent, it may therefore be contended that its profits were not 'made by the patentee as such.'

The profit, year by year, ought to be shown (*Perkins' Patent*, 2 W. P. C. 6), including the profits made by sales abroad (*Hardy's Patent*, 6 Moo. P. C. 441). The profits made under foreign patents, if any, must be shown (*Adair's Patent*, 6 App. Cas. 176). If books of account are not forthcoming, the petitioner will be required to explain their absence (*Markwick's Patent*, 13 Moore, P. C. C. 310). If a patentee so deals with his rights that he is unable to show what amount of profit has been made by working the patent, or what

has been received under licences, he will be considered to have disentitled himself to an extension (*Trotman's Patent*, L. R. 1 P. C. 118; *Saxby's Patent*, L. R. 3 P. C. 294). In taking an account of the profits and loss the patentee is entitled to charge for personal expenses and loss of time in endeavouring to bring the invention into use (*Trotman's Patent*, L. R. 1 P. C. 135; *Newton's Patent*, 14 Moore, P. C. C. 156; *Perkins' Patent*, 1 W. P. C. 6; *Carr's Patent*, L. R. 4 P. C. 541; *S. C.* 9 Moore, P. C. C. N. S. 379; *Poole's Patent*, L. R. 1 P. C. 514). And the cost of making experiments has been allowed (*Kay's Patent*, 1 W. P. C. 572). In some cases the profits made by the patentee as manufacturer have been allowed to be deducted (*Betts' Patent* 1 Moo. P. C. N. S. 49; *Galloway's Patent*, 1 W. P. C. 729); in other cases such profits were not allowed to be deducted (*Muntz's Patent*, 2 W. P. C. 121; *Saxby's Patent*, L. R. 3 P. C. 292). Law expenses incurred by the patentee in maintaining his rights are in general allowed in deduction of profits, but this will not be done when the patentee has compromised suits and given up costs to which he had an apparent title (*Hills' Patent*, 1 Moore, P. C. C. N. S. 258). In the matter of *Bailey's Patent* (R. P. C. vol. i. p. 1), where the administrator of a patentee petitioned for prolongation on the ground of the insufficiency of the remuneration obtained, and claimed at the bar to be allowed some deductions from the profits not mentioned in the petition or accounts, it was held that no such deduction could be made, and evidence on the point was inadmissible. Where the statement of the accounts is unsatisfactory the Committee will either direct that question to be taken before considering the merits of the invention, or adjudicate without reference to them (*Clark's Patent*, L. R. 3 P. C. 421; *S. C.* 7 Moore, P. C. C. N. S. 255; *Wield's Patent*, L. R. 4 P. C. 89; *S. C.* 8 Moore,

P. C. C. N. S. 300). But where the accounts are satisfactory on their face the usual course is to go into the question of merits first (*Houghton's Patent*, L. R. 3 P. C. 462).

The merit and utility of the invention ought to be shown by the testimony of persons of experience and weight (*McDougal's Patent*, L. R. 2 P. C. 1; *Betts' Patent*, 1 Moo. P. C. 49).

The petitioner must show that the parties interested had made efforts to bring the invention into public use.

Delay for a prolonged period on the part of an inventor in attempting to bring his invention into use is a good reason for refusing to grant an extension unless some reasonable excuse can be shown (*Norton's Patent*, 1 Moore, P. C. C. N. S. 339).

If the invention has not been brought into use, in spite of the earnest endeavours of the persons interested in the patent, that circumstance will be taken as a strong presumption that it is wanting in practical utility, and if not satisfactorily explained, the application will be refused (*Southworth's Patent*, 1 W. P. C. 487; *Kollman's Patent*, 1 W. P. C. 565; *Jones' Patent*, 1 W. P. C. 579; *Bakewell's Patent*, 15 Moo. P. C. 385; *Allan's Patent*, L. R. 1 P. C. 507; *Herbert's Patent*, L. R. 1 P. C. 389).

But the presumption of non-utility in the invention may be rebutted by evidence showing its merit and utility. (*Hughes' Patent*, L. R. 4. App. Ca. 174).

It is open to those who oppose the patentee's application, to go into evidence for the purpose of showing that the invention is wanting in novelty or utility, or that it is imperfect; and they may likewise point out defects in the specification. It is sufficient, prior to tendering evidence of instances of anticipation, to state the grounds of objection to an extension without stating the particulars (*Ball's Patent*, 4 App. Cas. 171).

The fact of improvements having been made by other persons in the patentee's invention after the date of his patent, does not afford ground of opposition to an application for an extension if the invention has a merit of its own, and if the patentee has not reaped a benefit in proportion to that merit (*Galloway's Patent*, 1 W. P. C. 727; *Napier's Patent*, 6 App. Cas. 174).

Nor is it a valid ground of objection that the manner of working the invention had been varied since the filing of the specification (*Heath's Patent*, 2 W. P. C. 257).

If a patentee has allowed his foreign patents to lapse, that is not a ground for refusing the prayer of the petition (*Adair's Patent*, 6 App. Cas. 176; and see *Johnson's Patent*, L. R. 4 P. C. 79; *Hills' Patent*, 1 Moore, P. C. N. S. 258).

But if the invention as originally specified proved a failure (*Bell's Patent*, 2 W. P. C. 160), or when it was only made completely successful by adopting improvements introduced by other persons from abroad (*Woodcroft's Patent*, 1 W. P. C. 740), the patentee was thought disentitled to an extension.

On the other hand, if the introduction of the invention has been strongly opposed by persons engaged in the trade (*Stafford's Patent*, 1 W. P. C. 563; *Robert's Patent*, 1 W. P. C. 573), or if the patentee has never been able to raise the necessary funds (*Wright's Patent*, 1 W. P. C. 575), or if he has been engaged in heavy litigation arising out of the patent (*Heath's Patent*, 2 W. P. C. 257; *Russell's Patent*, 2 Moo. 496 P.C.; *Pettit Smith's Patent*, 7 Moo. P. C. 133), these have been considered good grounds for granting an extension.

If litigation, involving the question of the validity of the patent, should be going on at the time of the application for a prolongation, the Committee will not go into the question, but will assume the patent to be

valid (*Bett's Patent*, 1 Moore, P. C. C. N. S. 49); unless the invalidity is beyond all reasonable doubt, in which case they will not grant an extension (*Woodcroft's Patent*, 2 W. P. C. 30; *Hills' Patent*, 1 Moore, P. C. C. N. S. 258; *McInnes' Patent*, L. R. 2 P. C. 54; *S. C.* 5 Moore, P. C. C. N. S. 72). If a competent tribunal should, after the grant of a new patent, decide that the original patent was invalid, the new patent will share its fate, and will be invalid likewise (*Kay's Patent*, 1 W. P. C. 571). On the hearing of the application to extend the term of *Honiball's Patent* (3 Eq. Rep. 230; *S. C.* 2 W. P. C. 208) it was said that the grant of an extended term is to be considered as a new grant by new letters patent, subject to the same conditions, open to the same objections, and in ordinary cases entitled to the same advantages, as the original grant. So that, in point of fact, the extension decides nothing, one way or other, as to the validity of the patent. And therefore, where it is only a matter of doubt as to the validity of the patent—as, for example, where the evidence is conflicting—the extension will be granted, if there appear good grounds *aliunde* for that course. When it appeared that a patentee had agreed by deed with a public company to grant an exclusive licence, and also covenanted with them to obtain at the expiration of the term a prolongation of the patent for the same purpose, the application for a prolongation was refused by the Privy Council, on the ground that the agreement was contrary to public policy and repugnant to the spirit of the statute 5 and 6 William IV. c. 83 (*Cardwell's Patent*, 10 Moore, P. C. C. 488).

The jurisdiction conferred upon the Judicial Committee by the Legislature, being an extraordinary one, is to be exercised, as remarked in the Council Chamber, only on the most special grounds alleged and proved in

reference to each case, and at the discretion of the Committee; for the extension of a patent is a matter of favour, not of right. In considering their decision the Committee is, according to the twenty-fifth section of the Act of 1883, to 'have regard to the nature and merits of the invention in relation to the public, to the profits made by the patentee as such, and to all the circumstances of the case.' In coming to a decision they seek to meet the justice of the case with respect to the adequacy or inadequacy of the patentee's remuneration, regard being had to the patentee's opportunities and his general management of the matter. If he has met with loss, as the total result of his transactions under the patent, and there has been no neglect or gross mismanagement on his part, there is good *primâ facie* ground for an extension; but if a certain amount of profit has been derived from working the patent, a decision is less easily formed. The question to be considered, it has been said, is not simply what the patentee has received, but what the patent has gained or what it ought to have gained with proper management.

Assuming that the patentee's conduct in regard to this part of the case is not open to remark, it is obvious that the merit of the invention is now an element to be considered, since 100*l.* may very well reward an invention of small utility, whilst 10,000*l.* may be an inadequate payment for a discovery of great public benefit, the working of which has been attended with heavy losses and extraordinary anxieties. The amount of inventive power will be taken into consideration, as well as the more or less time and trouble expended by the inventor in making experiments, either previously to his discovery, or in testing it, or in carrying it out. Inventors have different degrees of meritoriousness. It is not, however, to be assumed, that because the step in improvement taken by an inventor is small, his

merit is likewise small, and his invention unimportant. A very small addition or alteration may have altogether escaped notice until seized and turned to account by an acute mind, and its adoption may lead to most important consequences in the manufacture with which it is connected. The reward of such an invention ought not to be made proportionate to its apparent insignificance. Common justice dictates that the benefit an inventor has conferred on the public ought to be regarded; and the advisers of the Crown, acting under this idea, will give him the opportunity of reaping a recompense in some degree commensurate with the value of the result. In delivering judgment on an application to the Privy Council for an extension of *Soames' Patent* (1 W. P. C. 729), *Lord Brougham* used these words: 'The whole history of science, from the greatest discoveries down to the most unimportant —from the discovery of the system of gravitation itself, and the fractional calculus itself, down to the most trifling step that has ever been made—is one continued illustration of the slow progress by which the human mind makes its advance in discovery. It is hardly perceptible, so little has been made by any one step in advance of the former state of things, because generally you find that just before there was something very nearly the same discovered or invented.' His lordship proceeded to say, that in the case of a new principle or a novel invention—for instance, a new process—the smallness of the step did not furnish any argument against its importance. But when a new application only is under consideration, such an application as might easily suggest itself to any person—a new application of a well-known simple process, which had been employed with respect to other substances—then, when a patentee comes to apply for an extension of his patent, the smallness of the step involved in the patented

invention will be taken into consideration in determining the length of the extension. In this case the invention consisted in an application of mechanical pressure to separate the solid and fluid constituents of cocoa-nut oil. The invention having been of moderate benefit to the public, the moderate extension of three years was granted to the patentee. See also the remarks of Lord Kingsdown on *Hills' Patent* (1 Moore, P. C. C. N. S. 258), and of Lord Cairns in *Saxby's Patent* (L. R. 3 P. C. 294), as well as the case of *Derosne's Patent*, 4 Moo. P. C. 418.

In the case of a patent obtained for an invention imported from abroad, which invention had been previously patented in a foreign country, the British patent became void under the twenty-fifth section of the 15 and 16 Vict. c. 83 at the expiration of the foreign patent; and when application for a prolongation of such a patent was made, it was refused (*Aube's Patent*, 9 Moo. P. C. 43; *Poole's Patent*, L. R. 1 P. C. 514; *Adair's Patent*, L. R. 6 A. C. 176; *Hills' Patent*, 1 Moo. P. C. N. S. 258). And this rule was even extended to cases of patents for imported inventions, when the foreign patent was dated shortly after the British patent (*Newton's Patent*, 14 Moore, P. C. C. 156; *Normand's Patent*, L. R. 3 P. C. 193; *S. C.* 6 Moore, P. C. C. N. S. 477; *Blake's Patent*, L. R. 4 P. C. 535; *S. C.* 9 Moore, P. C. C. N. S. 373).

This Act having been repealed, no objection can now be founded on the authority of these decisions with reference to patents issued under the new Act; nor, apparently, with reference to patents previously issued, which had not been avoided by the statute of Victoria. But if any patent granted before the commencement of the new Act had been rendered void by the operation of the statute before that date, then it would seem that the cited decisions would still be ap-

plicable in case an extension of the patent were petitioned for.

Before the Patent Act of 1883 was passed, it had been decided that the Crown, at any time before the Great Seal was affixed, could countermand the warrant for sealing, upon a proper case being made out. Thus where patentees had applied for a prolongation of their patent, and had obtained a recommendation from the Judicial Committee of the Privy Council, upon which an order was drawn up for a prolongation, a petition was afterwards presented to the Crown, seeking to revoke this order; and this being referred to the Judicial Committee, it was held that this Committee has authority, under 3 and 4 William IV. c. 4, s. 4, to entertain such a petition, and to recall the warrant for sealing the letters patent (*Schlumberger's Patent*, 9 Moore, P. C. C. 1).

The new patent bears date the day after the expiration of the original term. If any one should use the invention in the interval between the expiration of the original term and the grant of the new patent, he is not liable for an infringement. Moreover, those who may have invested capital in working it during that interval may attend before the Committee, and oppose the application, or prefer a claim to have their acts protected and their expenditure made good (*Russell* v. *Ledsam*, 14 M. and W. 574).

Where a patent seems deserving of prolongation only in respect of one head of invention out of several, the prolongation will be granted solely with reference to that head (*Bodmer's Patent*, 8 Moore, P. C. C. 282; *Lee's Patent*, 10 Moore, P. C. C. 226; *Napier's Patent*, 6 App. Cas. 174).

In the case of two cognate patents which had different terms to run, it was ordered that the extensions granted should be such that they should both

expire on the same day (*Johnson's and Atkinson's Patents*, L. R. 5 P. C. 87).

Where the invention is one of great merit, and the patentee has assigned his interest in it to another person for a sum which, looking at the profits likely to be derived from working the invention, appears an inadequate consideration, the Privy Council will see that the patentee receives further reward. With this view, a condition is sometimes introduced into the new patent, making it void in case a fixed annual sum, or a certain share in the profits, be not paid to the patentee by the assignee (*Whitehouse's Patent*, 1 W. P. C. 473; *Hardy's Patent*, 6 Moore P. C. C. 441; *Morton's Patent*, 1881).

So also where a patentee had mortgaged his patent, and he and his mortgagees asked for a prolongation, it was granted to the patentee alone (*Bovill's Patent*, 1 Moore, P. C. C. N. S. 348). Again, where the petition had been presented by the patentee and the assignee of a moiety of the patent, and the patentee had died before the hearing, a prolongation was granted on the condition that the assignee should hold one moiety of the new term on trust for the personal representatives of the deceased patentee (*Herbert's Patent*, L. R. 1 P. C. 399). Other special conditions are sometimes inserted in the new letters patent; for example, that the patented article should be sold to the public at a certain price (*Hardy's Patent*, 6 Moore P. C. C. 441); that licences should be granted on certain terms (*Mallet's Patent*, L. R. 1 P. C. 308; *S. C.* 4 Moore, P. C. C. N. S. 175); or that the Admiralty should have the privilege of using the invention (in this case an improved propeller for steam and other vessels) without licences from the patentee (*Pettit Smith's Patent*, 7 Moore, P. C. C. 133). But in the cases of *Lancaster's Patent* (2 Moore, P. C. C. N. S. 189) and *Carpenter's Patent*

(*ibid.* 191) the Judicial Committee refused to insert this latter condition. However, in some later cases the condition was imposed that the Government and all contractors employed by them should be at liberty to use the invention, and this condition seems to be now usual in cases of inventions that are likely to be required by the Government (*Hughes' Patent*, 4 App. Cas. 174; *Napier's Patent*, 6 App. Cas. 174; *Moncrieff's Patent*, July 1883). For instances of other special conditions introduced into the new patent, see *Bodmer's Patent* (8 Moore, P. C. C. 282); *Normandy's Patent* (9 Moore, P. C. C. 452).

When a prolongation of a patent term has once been granted, the jurisdiction of the Judicial Committee is exhausted, and they have no power to entertain an application for a further extension (*Goucher's Patent*, 2 Moore, P. C. C. N. S. 532).

When an order has been made by her Majesty in Council for the extension of a patent, or for the grant of a new patent, an office copy of such order must be forthwith left at the Patent Office that it may be entered in the register. See Rule 71 of the Patents Rules 1883.

COSTS.

The seventh sub-section of the twenty-fifth section of the Patent Act of 1883 directs that the costs of all parties of and incident to proceedings for the extension of a patent shall be in the discretion of the Judicial Committee, and the orders of the Committee respecting costs shall be enforceable as if they were orders of a division of the High Court of Justice.

Where the ground of opposition to a patentee's application is frivolous, costs have been awarded to him. On the other hand, if a successful opposer has conducted his case in a proper manner, he may obtain his costs

(*Honiball's Patent*, 9 Moore, P. C. C. 394; *Johnson's Patent*, L. R. 4 P. C. 75; *Hills' Patent*, 1 Moore, P. C. C. N. S. 271; *Wield's Patent*, L. R. 4 P. C. 89; *S. C.* 8 Moore, P. C. C. N. S. 300; *Newton's Patent*, March 1881). Costs of opposition have been given against a petitioner who abandoned his application (*Mackintosh's Patent*, 1 W. P. C. 739; *Milner's Patent*, 9 Moore, P. C. C. 39).

It is not unusual for the Privy Council to award opposers a lump sum for costs, to be (when more than one) divided between them. In the case of *Newton's Patent*, March 1881, the opposers were so awarded 1,000*l.* In the case of *Johnson's Patent* (L. R. 4 P. C. C. 83), the opposers were ordered to receive 500*l.*, and in *Ball's Patent* (4 App. Ca. 171) an order was made for payment of 400*l.* to the opposers in lieu of costs.

By the Privy Council Rules in patent cases, the taxing officer is empowered to allow or disallow at his discretion all payments made to persons of science or skill examined as witnesses to matters of opinion chiefly.

DECISIONS OF THE PRIVY COUNCIL.

We shall bring this chapter to a close by mentioning a few cases which will illustrate what has been said with reference to the considerations guiding the Judicial Committee in arriving at a conclusion in regard to the term of extension under different circumstances.

On an application for an extension of a patent granted to James Kay, for improved machinery for preparing and spinning flax, it was shown that the patentee had expended 500*l.* in experiments, 500*l.* in obtaining his patent, 2,200*l.* in law expenses, and that he had made about 6,800*l.* profit. The invention was one of great utility, was used by nearly all the flax-spinners in the kingdom; but looking at the sum

already cleared by the patentee, it was thought that a prolongation for three years would satisfy the justice of the case (*Kay's Patent*, 1 W. P. C. 568).

Richard Roberts obtained a patent for improvements in spinning-jennies, the value of which was so great that, during the last three or four years of the original term, 5,000*l.* a year had been made by the patentee. In consequence, however, of piracies, of combinations amongst workpeople, but chiefly of a fire, supposed to have been the act of an incendiary, which destroyed the patentee's premises, and entailed a loss of 10,000*l.* beyond the insurance, the profits did not reach the amount of loss by several thousand pounds. The Committee of the Privy Council, guided by the ingenuity of the invention, and the peculiar character of the resistance to its introduction, were of opinion that seven years' prolongation was merited (*Robert's Patent*, 1 W. P. C. 573).

L. W. Wright applied for an extension of his patent for improvements in bleaching apparatus, and gave evidence before the Committee of his pecuniary embarrassments, and the disputes which had arisen out of his partnership with various persons; which embarrassments and disputes had prevented the introduction of the invention to the trade. He showed that the invention had been successfully practised by several bleachers, but that he had hitherto derived no benefit whatever from it. The Committee reported that it would be proper to prolong the term for seven years (*Wright's Patent*, 1 W. P. C. 575).

A patent for a new method of preparing iron plates for tinning was granted in 1839 to Thomas Morgan, who, being unable to work the invention, had sold his patent right for 200*l.* to persons who applied, in conjunction with the patentee, for an extension of the term. The assignees had made a profit of about 1,000*l.*

a year for three years, and the patentee, in addition to the sum received from them, was making about 2*l.* a week out of the patent. The invention appearing to possess only a moderate degree of merit, the Committee thought that the benefit received by the patentee and his assignees was a sufficient reward, and they refused the application (*Morgan's Patent*, 1 W. P. C. 737).

A patent for printing yarns of any fibrous materials was granted in 1828 to Bennet Woodcroft, who, on the expiration of the original term, applied for an extension. The patented process gave to cloth made of yarn, printed by it, a peculiarly clouded appearance, and the invention gave rise to the manufacture of clouded silks and fabrics. During the first four years of the patent 7,000*l.* were realised under it. Certain duty, however, was taken off other goods, and from this cause and others a large capital invested in working the patent ceased to be profitable, and the patent right became of small value. At a subsequent time the invention, under an improved form, was stated to have become of considerable value, and it was thought proper to apply for an extension of the patent. But the Committee, having regard to the amount of profit already realised, and to the fact that the invention, in its improved and valuable form, was introduced from abroad by other persons than the patentee, refused the application.

In 1840, Orlando Jones obtained a patent for improvements in the manufacture of starch. His method consisted in applying a weak solution of caustic alkali to rice. It was shown, at the hearing of an application for an extension of the patent, that the principle of the invention had been discovered by another person prior to the date of Jones' patent, although Jones was not aware of the fact. The invention being thus shown

to have no novelty, the application was refused, and costs to the amount of 100*l.* were decreed against the petitioner.

On the application for an extension of Derosne's patent, for improvements in refining sugar, it appeared that the patentee's net profit had been about 3,300*l.* But the benefit to the public was so great, being appreciable in every pound of sugar consumed, that an extension of six years was granted (*Derosne's Patent*, 2 W. P. C. 1).

G. F. Muntz applied for an extension of his patent for improvements in the manufacture of sheathing for ship bottoms, and showed that he had made 55,000*l.* by the manufacture during the existence of the patent. The applicant contended that this sum did not represent his profit as an inventor and patentee, but his profit as a manufacturer. But the Committee of the Privy Council said it was impossible to sever these two heads of profit. It was by means of the patent that he had made the profit. It had given him a monopoly preference; because as patentee he was enabled to sell and trade in a manner which, but for his invention and his patent, he could not have done. The application for a prolongation of the patent was refused (*Muntz's Patent*, 2 W. P. C. 113). See also *Hills' Patent* (1 Moore, P. C. C. N. S. 258); *Saxby's Patent* (L. R. 3 P. C. 292; *S. C.* 7 Moore, P. C. C. N. S. 82).

A patent was obtained in 1831, by A. M. Perkins, for improvements in an apparatus for heating air in buildings, heating fluids, &c.; and in 1845 he applied for an extension, on the ground that he had been inadequately rewarded. The ingenuity of the invention, and its application to a great number of purposes, having been shown, the accounts were investigated; when it appeared that there had been a profit of 15,176*l.* upon gross receipts to the amount of 64,920*l.*

The patentee claimed further to reduce the sum representing his profits, by deducting 500*l.*, the cost of experiment, 2,700*l.* interest at five per cent. on the average amount of capital employed, and 5,400*l.* for an allowance of 400*l.* a year to the patentee for his personal superintendence of the business. These sums reduced the profits to 6,576*l.* net. An extension of five years was granted, the invention being ingenious and useful (2 W. P. C. 7).

An application for the extension of a patent for improvements in the manufacture of steel was opposed on the ground that, whereas the patented process consisted in the addition of carburet of manganese to the crucible, it had been subsequently discovered that a better process of making steel was to place carbonaceous matter and manganese separately in the crucible, and this process obtained generally in practice. The Privy Council thought that the merit of the original invention was not thereby materially detracted from, and they granted an extension for seven years. In granting so long a time the litigation going on in the courts of law was taken into account, as it was thought probable that some time would elapse before the litigation would terminate, and the patentee's representatives have the benefit of the extension granted (*Heath's Patent*, 2 W. P. C. 257).

Whitehouse, an ingenious mechanic, procured a patent for improvements in the manufacture of iron tubes, which he assigned to his master, Russell, who laid out 14,000*l.* in works to carry out the manufacture. The tubes were in great demand, being applicable to a variety of new purposes; but, as the manufacture was simple, many expedients were resorted to to evade the patent, and Mr. Russell was involved in much litigation; in consequence of which, combined with the loss incurred by surreptitious manufacture and sale, his

profits were very considerably reduced. On these grounds he applied for a prolongation of the patent, and produced evidence to show the value and importance of the invention, the losses he had suffered from infringements, and the great reduction that would take place in the value of the premises and machinery (much of which was fitted only for the particular manufacture) if the patent were thrown open. He further showed that his life had been endangered by the anxiety of certain law proceedings. One witness stated that, if the manufacture were thrown open, it would hardly be worth following: the process was so beautifully simple, that it would almost be within the reach of any person of capital. The net profits amounted to about 13,000*l.*; but this was shown to be not much greater than the ordinary profits on stock without the protection of a patent. Taking all this into consideration, the Committee thought the patent ought to be extended for six years, the original patentee receiving 500*l.* a year out of the profits for that time (*Whitehouse's Patent*, 1 W. P. C. 473).

A patent for forging and shaping small articles in metal was obtained by Mr. Ryder in 1841: when he applied for an extension, he pleaded that though the profits had been 7,000*l.*, they had only been made during the last four years. This, however, was held to be no ground for the application in the face of the large sum realised, and the petition was dismissed (*Ryder's Patent*, 'Pract. Mech. Journ.' vol. vii. p. 238).

It will have been remarked that the maximum period of extension in these cases was seven years. To induce the Judicial Committee to recommend an extension for a longer time, a case of the strongest kind must be made out.

In *Ruthven's Patent* ('Pract. Mech. Journ.' 2nd series, vol. viii. p. 159), which was a patent for improve-

ments in the propulsion of vessels, the invention was proved to be of very great merit, and to have failed in being brought into general use through circumstances altogether independent of the will and without the fault of the inventor, who had not merely derived no profit, but had suffered considerable loss from his patent. It was shown, moreover, that the Admiralty had then lately instituted experiments with a view to the adoption of the invention, and that several friends of the inventor were willing to provide large capital for working the invention, should a prolongation be obtained. Evidence was also given that from the nature of the invention it would necessarily be a long time before its merit could be properly brought before the public. Under these circumstances the Judicial Committee (stating that they considered the case exceptional) granted a prolongation for the unusual period of ten years.

In the case of *Sillar's Patent* (Goodeve's Cases, p. 581) it appeared that the patent had been sold by the patentees to a Joint Stock Company, who had paid them a sum which seemed to be commensurate with the value of the invention. The Company had afterwards floated their shares in the market, and had thereby made considerable profit. They then applied for an extension of the patent, but it was refused, although they had been considerable losers by working the invention.

Major Childs obtained a patent in 1869 for improvements in the manufacture of bread and biscuits. By this invention a nutritious aërated bread could be made by machinery with regularity and certainty. Down to 1873 the inventor had failed in his endeavours to get the invention fairly worked, but in that year he became chairman of the Aërated Bread Company, and let them have the use of his patent. It was not until

1883 that a large central manufactory was started in London for the making of bread by his process. He received a salary of 600*l.* as chairman and managing director of the company, which was paying 8 per cent. on the shares, of which he held 12,000. The counsel appearing for the Crown estimated that the inventor had made a profit under the patent of between 20,000*l.* and 30,000*l.*, including the rise in the value of the shares held by him. The Judicial Committee were satisfied that the invention possessed considerable merit, and although the inventor had made for the last five years a profit which was increasing, they came to the conclusion that he had not been sufficiently remunerated, and a prolongation for five years was granted. *Childs' Patent.* The 'Times,' Dec. 1883.

The recent case of Bailey's patent (1 R. P. C. 1), shows that the old views of the Judicial Committee as to manufacturers' profits, as distinguished from the profit which may be considered more directly to belong to the patent, will still be insisted upon. This case also shows that if the patentee wishes to claim an allowance for personal trouble it must appear in the accounts.

Newton's patent (1 R. P. C. 177) shows that the practice of the Privy Council, as to the necessity for including profits derived from foreign patents in the accounts, has not been altered by the recent Act.

CHAPTER XII.

ASSIGNMENTS AND LICENCES.

Power both to assign and to license is by implication given to the patentee by the patent. A patentee is empowered by the thirty-sixth section of the new Patent Act, 1883, to assign his patent for any place in or part of the United Kingdom or Isle of Man as effectually as if the patent were originally granted to extend to that place or part only.

Rules 65 to 69 prescribe a somewhat complicated system of registry for assignments and licences. In all cases there must be a request in writing to the Comptroller to register, and the original document to be registered, together with an examined copy, must be left with the Comptroller. The practice of registration under the Act of 1852 was quite as effective and much more simple.

To be a valid instrument, an assignment ought to be a deed under hand and seal. It is usual to introduce into assignments covenants on the part of the patentee that he is the true and first inventor, and that the patent is valid. And it may be well to insert a covenant binding the assignor not to seek leave to amend the specification or drawings without the written consent of the assignee.

Under the twenty-fifth section of the Patent Act of 1852, a patent obtained in the United Kingdom for an invention previously patented in a foreign country, came

to an end at the expiration of the foreign patent. But as this provision has not been inserted in the Patent Act of 1883, it is not now of importance for an assignee to see that the foreign patent is kept on foot, although when the assignment deals with a British patent obtained under the Act of 1852 it is still incumbent upon him to see that the foreign patent had not expired prior to January 1, 1883.

It is no answer to an action to enforce a contract for the purchase of a patent for a stipulated sum (*Hall* v. *Conder*, 2 C. B. N. S. 22), to plead that the patent is wholly worthless and of no utility, and that the subject-matter of the patent was not the novel invention of the plaintiff, there being no proof of fraud, and no express warranty. Such a contract was held merely to have the effect of placing the purchaser in the same situation as the seller was with reference to the patent, and the purchaser is bound to take it with all its faults. This being so, it is desirable to consider whether or not an express warranty of the patent should not be introduced into contracts of this nature. See also *Smith* v. *Neale* (2 C. B. N. S. 67).

The purchaser, in addition, ought invariably to have a search made by a competent person at the Patent Office and elsewhere as to the novelty of the invention, prior to his entering into a contract for the purchase.

One of two joint patentees cannot assign more than his share of the patent (*In Re Horsley and Knighton's Patent*, L. R. 8 Eq. 475).

The assignee of part of a patent separate from other parts may bring his action for an infringement of such part without joining as plaintiffs those persons who have distinct interests in the other parts, but have no interest in the damages sought to be recovered (*Dunnicliff* v. *Mallet*, 7 C. B. N. S. 209). This decision was mentioned with approval by the Court when delivering

judgment in the case of *Walton* v. *Lavater* (8 C. B. N. S. 184), where it was unsuccessfully contended that the assignee of an undivided share of a patent had not a sufficient legal interest to sue for its infringement.

One co-owner of a patent may sue alone for the recovery of profits due for the use of the patent without making his co-owners parties (*Sheehan* v. *Great Eastern Railway Company*, L. R. 16 Ch. D. 59).

Where a patentee has assigned a share of the profits of the patent, the assignee is entitled to call on a licensee of the patentee for an account, but the assignee suing must make the assignor and the assignees of other shares of the profits parties to the suit, and must offer to pay any moneys due from the assignor to the accounting licensee (*Bergmann* v. *Macmillan*, L. R. 17 Ch. D. 427).

The assignee with notice, of the original assignee takes subject to the first assignee's covenants (*Werderman* v. *Société Générale d'Electricité*, L. R. 19 Ch. D. 247).

Where a patent is assigned to two persons and one dies, the survivor may sue for an infringement committed during the lifetime of the other (*Smith* v. *London and North-Western Railway Company*, 2 E. & B. 69). In the event of a patentee's bankruptcy, the patent becomes vested in the trustee who may sue for infringements committed before the bankruptcy (*Hesse* v. *Stevenson*, 3 Bos. & P. 577; *Bloxam* v. *Elsee*, 9 Dowl. & R. 215; *S.C.* 6 B. & C. 169).

Where a partnership at will was formed for the purpose of working an invention for which a patent had been previously obtained and registered in the name of one of the partners alone, it was held that the patent became an asset of the partnership, and each partner acquired a right to work the invention. Also that this right was not taken away by the registered owner

assigning the patent to a third party who had notice of the existence of the partnership (*Kenny's Button-holing Company* v. *Somerville*, 37 L. J. Rep. N. S. 878).

It is not contrary to public policy for a patentee, on the assignment of his patent, to contract to assign to the purchaser all future patents which the vendor may obtain having relation to the invention already patented or being of similar nature (*Printing and Numerical Registering Company* v. *Sampson*, L. R. 10 Eq. 462).

A body corporate may take an assignment of a patent, and be registered as the proprietor thereof in its corporate name. Rule 70 of the Patents Rules 1883.

It is desirable to register both assignments and licenses as soon as may be after their execution. An assignee cannot maintain an action for an infringement if his assignment is not registered. See the Chapter on Registration, and Rules 65–69 of the Patents Rules 1883.

LICENCES.

The twenty-second section of the Patent Act of 1883 introduced an entirely new regulation as to licences by empowering the Board of Trade to order a patentee to grant licences to persons petitioning the Board.

'If on the petition of any person interested it is proved to the Board of Trade that, by reason of the default of a patentee to grant licences on reasonable terms, (*a*) the patent is not being worked in the United Kingdom; or (*b*) the reasonable requirements of the public with respect to the invention cannot be supplied; or (*c*) any person is prevented from working or using to the best advantage an invention of which he is possessed, the Board may order the patentee to grant licences on such terms as to amount of royalties, security for payment, or otherwise, as the Board, having regard to the nature of the invention and the circum-

stances of the case, may deem just, and any such order may be enforced by mandamus,' which will require an application to the High Court of Justice.

As to the procedure on petitions for compulsory licences see Rules 57–63 of the Patents Rules 1883.

The orders of the Board in relation to this difficult and delicate matter seem to be absolute and final, no appeal from their decision being given by the Act; nor is any power to award costs given to the Board. Patents granted before the commencement of the Act, or on applications then pending, are excepted from the operation of this provision (sect. 45).

Licences have various intents. In their most general form they are tantamount to an assignment of the patentee's whole rights. But usually they are for a term shorter than that mentioned in the patent, and sometimes they do not extend to the whole of the invention. A licence may be restricted, likewise, to a particular district. Usually a power to render the licence void is reserved to the patentee in case the licensee commits a breach of the covenants. What is called an *exclusive licence* is one by which the patentee binds himself not to empower any other person to exercise the patent privilege, either at all or within a given district.

A licence to A. to manufacture a patent article is an authority to his vendees to vend it without the consent of the patentee (*Thomas* v. *Hunt*, 17 C. B. N. S. 183).

The consideration for the grant of a licence is usually an immediate money payment or a periodical payment, which may be either of a certain amount, or dependent upon the extent to which the licensee uses the invention. In the last case care should be taken not to create a partnership when no partnership is contemplated. See *Ridgway* v. *Philip* (1 Cr. M. & R. 415); *Elgie* v. *Webster* (5 M. & W. 518).

In preparing licences the following points should be attended to:—The patentee ought to enter into the usual qualified covenants that the patent is valid, and that he has a right to grant the licence. The licensee should covenant to pay any sums, the payment of which is postponed to a future time. Where the payments are to vary with the extent to which the licensee shall use the invention, there ought to be covenants, on the part of the licensee, to render properly verified accounts, and to allow periodical inspections of books, machinery, stock, &c. If it be intended that the licensee should not be permitted to question the validity of the patent or the sufficiency of the specification, recitals should be introduced affirming these points, or express covenants debarring the licensee from raising the question. But recitals can only affirm the facts as they stood at the time of the execution of the deed; covenants may be made to apply to all future time. Recitals, however, will have the effect of stopping the parties from disputing the facts recited. (*Bowman* v. *Taylor*, 2 Ad. & El. 278; *Hills* v. *Laming*, 9 Exch. 256.) In the absence of such recitals or covenants, a licensee, when sued for money reserved by the licence, may, where the contract is executory, or where there is the taint of fraud, set up, as a defence, that the patent is void (*Hayne* v. *Maltby*, 3 T. R. 438; and see *Pidding* v. *Franks*, 1 Mac. and Gord. 56). (On the other hand, refer to the case of *Lawes* v. *Purser*, 6 Ell. and Bl. 930.) This was an action brought by a patentee upon an agreement whereby the defendant contracted to pay a certain sum per ton of an article manufactured and sold by him, by permission of the plaintiff to him given at his request, the sole manufacture and sale of such article being the subject of the plaintiff's letters patent. The invention having been used by the defendant, he refused to pay the stipulated sum, pleading that the letters patent

were void, and that he had a right to make and sell the article without licence. It was held that the defendant was not entitled to set up such a defence, the contract having been executed, and no fraud being alleged. But one of the judges thought that if the defendant had given notice that he disputed the validity of the patent, and would in future use the invention in his own right, such notice would change the position of the parties: for after it the patentee might sue the defendant for an infringement of his patent for any subsequent user; and perhaps, in an action on the agreement for the price of such subsequent user, the invalidity of the patent might be a defence.

It is prudent to insert a clause giving the patentee power to render the licence void, in case of non-payment of royalties or other sums reserved, or on non-performance of any of the covenants. Power is sometimes reserved to place the royalties in the hands of a stakeholder during litigation affecting the patent.

It seems that a licence is not assignable to a third person in the absence of an express or implied power to assign, such as where the licence is granted to the licensee, his executors, administrators, or assigns.

'There is no decision as to the power of one grantee to grant a valid licence without the consent of his co-grantees. It appears, however, to be doubtful whether, except for the authority conferred by the granting and prohibitory clauses of the patent, any licence could be granted at all; and it will probably be found, therefore, that the question will in all cases turn on the words of the patent itself.'[1]

In the case of an exclusive licence it is desirable that the licensee should covenant to pay a certain minimum sum at stated periods in the shape of royalty;

[1] W. N. Lawson: Patents Designs and Trade Marks Practice, p. 2.

and in some cases to insert covenants on the part of the patentee to proceed against persons infringing the patent (see *Henderson* v. *Mostyn*, L. R. 3 C. P. 202), or to permit the licensee to proceed in the patentee's name. The Court will grant an injunction at the suit of exclusive licensees (*Renard* v. *Levinstein*, H. & M. 628).

When a sum of money has been paid for a licence, and the consideration fails, the money may be recovered. Thus in *Knowles* v. *Bovill* (22 L. T. N. S. 70), it appeared that a patentee had granted to the plaintiff a licence to use his patent, and had agreed to apply for a prolongation of the patent of which the plaintiff was to have the benefit; and he further agreed to grant a licence under a new patent for which he had applied. The patentee, however, died shortly afterwards without having done anything. It was held that the plaintiff could recover the money paid from the patentee's executors. On the other hand, it has been decided that money paid in consideration of a licence cannot be recovered by action when the patent turns out to be void (*Taylor* v. *Hare*, 1 Bos. and Pul. N. R. 260); except where fraud is proved (*Lovell* v. *Hicks*, 2 Y. and C. 472). To meet this case it will be prudent to have a covenant in the licence, under which the parties may readjust their accounts in the event of the patent proving void or voidable.

A licensee during the continuance of the licence cannot set up as a defence to an action for the royalty that the invention was not new or not useful, or that the patentee was not the first inventor, or that the specification is insufficient (*Noton* v. *Brooks*, 7 H. & N. 499; *Trotman* v. *Wood*, 16 C. B. N. S. 479; *Smith* v. *Scott*, 5 Jur. N. S. 1356; *Chavasse* v. *Stevens*, W. N. 1874, p. 193; *Adie* v. *Clark*, L. R. 2 App. Cas. 423; *Liardet* v. *Electric Lighting Co.*, W. N. 1883, p. 96).

But when in such a case the claim in the specification is susceptible of two constructions, one of which would make the specification bad, and the other and more natural one would make it good, it was held that the licensee may insist that the latter is the true construction (*Trotman* v. *Wood*, 16 C. B. N. S. 479). But now see *Adie* v. *Clark* cited above. Even where no formal licence has been executed, a person who has paid money in the nature of a royalty will not be allowed to dispute the validity of the patent (*Crossley* v. *Dixon*, 10 H. L. C. 293). Neither will a patentee, after assigning all his interest in a patent for a valuable consideration, be allowed, in an action against himself for an infringement, to raise the question whether the patent is void for want of novelty (*Walton* v. *Lavater*, 8 C. B. N. S. 162, 187; and see also *Chambers* v. *Crichley*, 33 Bea. 374). Furthermore, a licensee will not be permitted to use the invention without payment of the royalties he has covenanted to pay, even after the patent has been found invalid in proceedings between other parties (*The Grover & Baker Sewing Machine Company* v. *Millard*, 8 Jur. N. S. 713). But where judgment was given by consent before declaration filed in an action by a patentee against the members of a partnership firm for an alleged infringement, and the defendants immediately took a license to use the invention, and the patentee subsequently instituted a suit to restrain infringement against the defendants at law and two fresh partners, it was held that the defendants in equity were not estopped from disputing the validity of the patent (*Goucher* v. *Clayton*, 11 Jur. N. S. 107).

A licensee has, however, a right to have it ascertained what is the field covered by the specification as properly construed, and is entitled to say that he has not gone inside that field. He may seek to have the boundary of the patentee's invention defined with the

view of showing that he had not rendered himself liable to make the payments stipulated in the licence (*Adie* v. *Clark*, L. R. 4 App. Cas. 423). And after a licence has been determined, a licensee is at liberty to dispute the validity of a patent in a suit for an injunction to restrain an infringement (*Dangerfield* v. *Jones*, 13 L. T. N. S. 142; *Axmann* v. *Lund*, L. R. 18, Ch. D. 330; and see *Neilson* v. *Fothergill*, 1 W. P. C. 290).

It was held by *Lord Romilly, M. R.*, in *Mathers* v. *Green* (34 Beav. 170), that when one of three joint patentees had granted licences, he was bound to account to his co-patentees for the royalties received.

An exclusive licensee has a right to apply in the name of the owner of the patent for an injunction to restrain infringements (*Renard* v. *Levinstein*, 2 H. & M. 632); but an ordinary licensee has not such a right (*Newby* v. *Harrison*, 1 J. & H. 393), nor has the agent of the patentee (*Adams* v. *North British Railway Company*, W. N. 1873, p. 191).

A patentee will not be allowed to publish advertisements and circulars calculated to deter the public from dealing with his licensee (*Clark* v. *Adie*, 21 W. R. 764).

Formerly when the patent was silent as to the form of licence, a simple licence, without covenants, need not have been under seal (*Chanter* v. *Dewhurst*, 12 M. & W. 823; *Reuss* v. *Lever*, Ch. Div. April 9, 1879, *V. C.* Hall); nor, it seems, if it was not a deed, did it require a stamp (*Chanter* v. *Johnson*, 14 M. & W. 408). But now the form of patent set forth in the first schedule of the Act requires licences to be in writing under the hand and seal of the patentee. A stamp of 10*s.* must be impressed in ordinary cases, and an *ad valorem* stamp on the consideration-money when a fixed sum is paid. When a licence contains a covenant for the payment of a minimum royalty, the Stamp Office insists

upon payment of an *ad valorem* duty upon the gross minimum royalty reserved, and this although the licence contains power for licensor or licensee to determine the licence.

Whether a licence not under seal was revocable or not depended on its construction (*Reuss* v. *Lever*, Ch. Div. April 9, 1879, cited above).

As to the procedure on the registration of licences see Rule 74 of the Patents Rules 1883 and Form M in the second schedule.

CHAPTER XIII.

THE REGISTRATION OF PATENTS, ETC.

THE twenty-third section of the Patent Act of 1883, directs that there shall be kept at the Patent Office a book called the Register of Patents, wherein shall be entered the names and addresses of grantees of patents, notifications of assignments and of transmissions of patents, of licences under patents, and of amendments, extensions, and revocations of patents, and such other matters affecting the validity or proprietorship of patents as may from time to time be prescribed. The Register of Patents will be *primâ facie* evidence of any matters by the Act directed or authorised to be inserted therein. Copies of deeds, licences, and any other documents affecting the proprietorship in any letters patent or in any licence thereunder, must be supplied to the Comptroller in the prescribed manner for filing in the Patent Office.

By the eighty-seventh section of the Act, where a person becomes entitled by assignment, transmission, or other operation of law to a patent, the Comptroller shall on request, and on proof of title to his satisfaction, cause the name of such person to be entered as proprietor of the patent, in the Register of Patents. The person for the time being entered in the Register of Patents, as proprietor of a patent, shall, subject to any rights appearing from such register to be vested in any other person, have power absolutely to assign,

grant licences as to, or otherwise deal with, the same and to give effectual receipts for any consideration for such assignment, licence, or dealing. Any equities in respect of such patent may be enforced in like manner as in respect of any other personal property.

Notices of trusts expressed, implied, or constructive, are not to be entered in the register nor to be received by the Comptroller (sect. 85).

The procedure as to the registration of patent documents is set forth in Rules 64–74 of the Patents Rules 1883. A fee of ten shillings is payable for each entry on the register.

The Court may (sect. 90) on the application of any person aggrieved by the omission without sufficient cause of the name of any person from the register or by any entry made without sufficient cause in such register, make such order for making, expunging, or varying the entry as the Court thinks fit; or the Court may refuse the application; and in either case may make such order with respect to the costs of the proceedings as the Court thinks fit. Further the Court may in any proceeding under this section decide any question that it may be necessary or expedient to decide for the rectification of a register, and may direct an issue to be tried for the decision of any question of fact, and may award damages to the party aggrieved. Any order of the Court rectifying a register must direct that due notice of the rectification be given to the Comptroller; and Rule 71 of the Patents Rules 1883 requires an office copy of the order to be left at the Patent Office.

It would seem that under the Judicature Acts there lies an appeal from any order made by a judge under this section (*Morgan's Patent*, 24 W. R. 245).

If any rectification of a register is required in pursuance of any proceeding in a Court in Scotland

or Ireland, a copy of the order, decree, or other authority for the rectification must be served on the Comptroller, and he is to rectify the register accordingly (sect. 111).

The Comptroller is empowered (sect. 91) to correct any clerical error in the name, style, or address of the registered proprietor of a patent.

The making of false entries in the register, the making of any writing falsely purporting to be a copy of an entry therein; and the tendering in evidence of any such writing, are declared to be severally misdemeanors (sect. 93).

The former registers of patents and of proprietors are to be deemed parts of the register of patents kept under the new Act (sect. 114), which is directed to be open at all convenient times to the inspection of the public, subject to such regulations as may be prescribed (see Rule 75).

Certified copies, sealed with the seal of the Patent Office, of any entry in such register will be given to any person requiring the same on payment of the prescribed fee (sect. 88, and see Rule 76).

The thirty-fifth section of the Patent Act of 1852 provided that until registration of an assignment the grantee of the patent should be deemed the proprietor of the exclusive privileges thereby granted; and it was held in *Chollet* v. *Hoffmann* (7 E. and B. 636) that an assignee could not bring an action for an infringement against third parties until his assignment had been registered. But in the case of *Hassall* v. *Wright* (L. R. 10 Eq. 509) *Sir R. Malins, V. C.*, was of opinion that an assignee of a patent might maintain a suit against the assignor and subsequent licencees of the assignor with notice of the assignment to restrain them from using the patent, although at the time of the institution of the suit the assignment had not been registered. And from the same case it seems that

registration relates back to the date of the assignment, so as to enable the assignee to maintain a suit to restrain infringement instituted between the dates of the assignment and registration. When the executors of a patentee obtained probate of their testator's will and assigned his patent, but the probate was not registered till after the assignment, it was held that the assignment was valid. (*Ellwood* v. *Christy*, 10 Jur. N. S. 1079; *S. C.* 11 L. T. N. S. 342).

Under the thirty-eighth section of the Patent Act of 1852, which gave power to the Courts to expunge entries in the register of patents similar to that conferred by the ninetieth section of the new Act, the Master of the Rolls ordered the registry of a second assignment of a patent to be expunged on the application of the assignees under a prior assignment, which had not been registered until after the second, as it appeared that the second assignment had been executed for a fraudulent and improper purpose. (*Re Green's Patent*, 24 Bea. 145). In another case, the Master of the Rolls said that if there were two deeds assigning the patent *simpliciter* to two different persons, and the second was registered before the first, and if it were clearly proved that the second deed was executed with full and complete notice of the prior one, though subsequently registered, he conceived he should have power to direct an entry to be made upon the register, stating the facts. In *Re Morey's Patent* (25 Bea. 58) it was said to be the duty of the Court to insert on the register any facts relating to the proprietorship, but not the legal inferences to be drawn from them. One of two joint patentees assigned by deed his interest in the patent to a third person, and released him from all claims on the part of both patentees. At the instance of the other patentee the Master of the Rolls ordered the entry of the assignment to be expunged (*Re Horsley and Knighton's Patent*, L. R. 8 Eq. 475).

In the matter of the same patent (L. R. 4 Ch. 784) it was decided that there was no appeal from such an order of the Master of the Rolls. But the jurisdiction having now been transferred to the High Court of Justice (*Re Morgan's Patent*, 24 W. R. 245), it would seem to be subject to appeal.

In *Speckhart* v. *Campbell* ('Times,' March 13, 1884) it was held by the Court of Appeal that a person (who in this case was a foreigner) may bring an action in his own name for an infringement when the patent is registered in the name of another person, if that other person is a trustee for the plaintiff.

CHAPTER XIV.

INFRINGEMENTS.

THE first section of this chapter will be devoted to a discussion of the substantive law and the reported cases; and the second will treat shortly of the practice connected with the proceedings for infringements in the High Court of Justice.

§ 1.—*The Substantive Law of Infringements.*

The rights of a patentee may be violated in several ways. 1. The invention may be overtly exercised exactly as the specification has described it without the permission of the patentee. 2. The invention may be copied not textually and literally, but with certain changes and variations, such as additions, omissions or substitutions of parts, so as to produce something colourably different from the original. 3. By dealing in articles made by the patented method. 4. By the user of articles made by the patented method.

As to the first mode of infringing a patent, nothing more need be said at present, because when the fact is capable of proof, the remedy can be readily applied. It is the second method of encroaching on his rights that gives most trouble to the patentee. Certain devices (mechanical equivalents, transpositions of parts, &c.) having been employed to give a different appearance to the copy with the design of seeming not to trespass within the pale set up by the patentee, and with the view of causing that copy to be mistaken for

a distinct plan, it becomes the patentee's task to expose the scheme and to show that the pretended novelty is in truth an infringement in disguise. The leading idea, or principle, as it is usually termed, remaining the same, the contrivances will be considered identical, and when that is capable of satisfactory proof, the continuance of the infringement may be stopped by application to a court of law, and the infringer may be compelled to make compensation for the injury he has committed.

A person will not be allowed to deprive an inventor of the fruits of his discovery by substituting a well-known equivalent, either chemical or mechanical, for some part of the patented invention. Where the question arises as to the infringement of the patent for a machine, the substance and not merely the form of the invention will be looked at in a court of justice. Therefore, where it is shown that two machines are alike in principle, and that the constructor of the second machine has carried the principle of the first into effect by substituting one mechanical equivalent for another, here it will be held that there has been an infringement. (See *Morgan* v. *Seward*, 1 W. P. C. 171; *Thorn* v. *Worthing Skating Rink Company*, L. R. 6 Ch. D. 415 *n.* *Adair* v. *Young*, L. R. 12 Ch. 21).

It will not be the less an infringement (said *Lord Cairns, C.*, in *Dudgeon* v. *Thomson*, L. R. 3 App. Ca. 44) because it has been coloured or disguised by additions or subtractions, which additions or subtractions may exist and yet the thing protected by the specification be taken notwithstanding.' And in the same case (p. 53) *Lord Blackburn* said, 'If part of the property in the invention be really taken, there is an infringement, however much that may be disguised or sought to be hidden. If that is detected by the patentee, and if what is taken is really part of his property given to

him by the letters patent, he has a right to proceed against the infringer, however ingeniously the colours may have been contrived to try to conceal the fact that there has been a taking of part of the property.'

The following cases will show clearly that to make a colourable alteration in a patented invention, or to arrive at the same result by means which are substantially the same, although independently discovered, will be an infringement of the patent. Walton took out a patent for making cards for carding textile materials with the aid of caoutchouc, the object being to obtain an increased degree of elasticity and durability. The wire teeth were described as inserted in a foundation of slices of caoutchouc, on the back of which a piece of cloth was cemented. The claim was not confined to the use of caoutchouc in slices, but he claimed the exclusive right of making cards by fixing the teeth in caoutchouc as the fillet, or sheet, or medium. After the date of this patent, Potter and Horsfall took out a patent for a new material for forming the backs of cards, and their mode of preparing it was by repeatedly passing a woven fabric of a peculiar construction through, and saturating it with, a solution of caoutchouc, and then drying it to evaporate the solvents, and leave the fabric impregnated and coated with caoutchouc, the object being to render the fabric so dealt with extremely elastic in the direction of the thickness of the fabric, so as to impart elasticity to the wire teeth when set. It was held (*Walton* v. *Potter*, 1 W. P. C. 585) that Potter's process fell within the generality of Walton's claim, and was an infringement of his patent. At the trial, *Tindal, J.*, told the jury that, 'when a party has obtained a patent for a new invention made by his own ingenuity, it is not in the power of any other person, simply by varying in form or in immaterial circumstances the nature or subject-

matter of that invention, to obtain either a patent for it himself, or to use it without the leave of the patentee, because that would be in effect and in substance an evasion of the right; and therefore what you have to look at upon the present occasion is not simply whether in form or in circumstances—that may be more or less immaterial—that which has been done by the defendants varies from the specification of the plaintiff's patent, but to see whether in reality, in substance and in effect, the defendants have availed themselves of the plaintiff's invention, in order to make that fabric or to make that article which they have sold in the way of their trade.' Then referring to a card purchased from the defendants, which was produced to the jury, he said, 'Now, what you have to say is, whether you are satisfied that the card produced is a specious variation in form only, an ingenious alteration in the mode of adaptation, or whether it is really and substantially a new discovery on the part of the defendants. In the one case it would be an infringement of the patent; in the other it would not. . . . There can be no doubt whatever that, although one man has obtained a patent for a given object, there are many modes still open for other men of ingenuity to obtain a patent for the same object; there may be many roads leading to one place; and if a man has, by dint of his own genius and discovery, after a patent has been obtained, been able to give to the public, without reference to the former one, or borrowing from the former one, a new and superior mode of arriving at the same end, there can be no objection to his taking out a patent for that purpose. But he has no right whatever to take, if I may so say, a leaf out of his neighbour's book, for he must be contented to rest upon his own skill and labour for the discovery, and he must not avail himself of that which has been before granted exclusively to

another; and therefore the question again comes round to this, whether you are of opinion that the subject-matter of this second patent is perfectly distinct from the former, or whether it is virtually bottomed upon the former, varying only in certain circumstances which are not material to the principle and substance of the invention.'

Under a patent for improvements in apparatus for the manufacture of sulphate of soda, &c., the plaintiff claimed the use of iron retorts worked in connection with each other. The essence of the invention was held to be the use of two chambers with separate furnaces worked in connection with each other, so that the materials might be decomposed in one and then removed to and finished in the other. The defendant for the same purpose employed two chambers, one of iron, the other of brick. This was decided to be an infringement of the patent (*Gamble* v. *Kurtz*, 3 C. B. 425).

Trotman obtained a patent for improvements in anchors. His mode of making the improved anchor was to affix the 'palm' and 'horn' to the back of the 'arm' by a separate operation. It was held that the making of similar anchors by forging the arm, palm, and horn all in one piece was an infringement (*Trotman* v. *Wood*, 16 C. B. N. S. 479).

In 1871, E. L. Hayward obtained a patent for an improved pavement-light. A piece of glass in the form of a prism was fitted into a frame and let into a floor with the object not only of allowing light to pass through, but also of sending it obliquely into the room below. In 1874, Hamilton took out a patent for a contrivance for the same purpose. He employed also a prism of glass shaped like that used by Hayward, except that pieces were cut out of it. The Court of Appeal held that as the notches had no effect on the

strength of the apparatus, nor any optical effect, affording, in fact, no advantage whatever, there was no substantial difference between the two contrivances, and the second patent was therefore adjudged to be an infringement of the earlier one (*Hayward* v. *Hamilton*, 'Engineer,' vol. 51, p. 408, Court of App., April, 1881).

It is not permissible for a person to evade a patent by simply taking the various steps of an operation or process in a different order; or by altering the shape of part of a machine in an unimportant particular (*Per Parke, B.*, in *Barber* v. *Grace*, 1 Exch. 339); or by transposing the action of some of the parts, as, for example, in a brick machine, moving the clay against the cutters, instead of making the cutters move against the clay (*Murray* v. *Clayton*, L. R. 7 Ch. 570).

When a mode of carrying a principle into effect has been invented, and the principle itself is new, then a patent can be obtained for securing not only that particular mode, but every other mode of carrying the principle into effect. 'When you have invented some mode of carrying the principle into effect,' said *Alderson, B.*, in *Jupe* v. *Pratt* (1 W. P. C. 146), 'you are entitled to protect yourself from all other modes of carrying the same principle into effect.'

'There never were two things to the eye more different,' said *Alderson, B.* (1 W. P. C. 146), commenting upon the case of *Crossley* v. *Beverley*, 'than the plaintiff's invention of a gas-meter, and what the defendant had done in contravention of the patent right. The plaintiff's invention was different in form, different in construction; it agreed with it only in one thing, and that was, by moving in the water, a certain point was made to open, either before or after, so as to shut up another, and the gas was made to pass through this opening; passing through it, it was made to revolve it. The scientific men, all of them, said, the moment a

practical scientific man has got that principle in his head he can multiply, without end, the forms in which that principle can be made to operate.'

In the case of the *Household Company* v. *Neilson* (1 W. P. C. 685), *Lord Justice Clerk Hope* said, 'You may obtain a patent for a mode of carrying a principle into effect; and if you discover not only the principle, but how it may be applied to a practical result by a mechanical contrivance and apparatus, and show that you are aware that no particular modification or form of the apparatus is essential in order to obtain benefit from the principle, then you may take out your patent for the mode of carrying it into effect, and are not under the necessity of confining yourself to one form of apparatus. . . . You may generally claim the mode of carrying the principle into effect by mechanical contrivance, so that any sort of apparatus applied in the way stated will more or less produce the benefit, and you are not tied down to any form.'

In the case of *Otto* v. *Linford* (Court of App., 46 L. T. N. S. 35), it appeared that the plaintiff, having patented a gas engine working on a certain new principle, the defendant had subsequently constructed an engine working in rather a different way with two pistons instead of one, and with six motions in place of four, which required the cams, slides, &c., to be altered. It was held that notwithstanding these differences, as he had borrowed the plaintiff's new principle, his engine was substantially similar to the plaintiff's, and was therefore an infringement. And the same doctrine holds good in chemical inventions. 'When a patent is taken out for a new result' (said *Mr. Justice Pearson*, in delivering judgment in the case of the *Badische Anilin und Soda Fabrik* v. *Levinstein*, 24 Ch. D. L. R. 156), 'and there is one process described in the specification which is effectual for the

purpose of arriving at that new result at the time when the patent is taken out, the patentee is entitled to protection against all other processes for the same result; and no person can, without infringing upon his patent, adopt simply a different process for arriving at the same result.'

And it has been held, that a patent for improvements in a known process secures those improvements to the patentee, whether applied to the process as known at the date of the patent, or to the same process altered and improved by discoveries not known at that time, so long as that process remains essentially the same (*Electric Telegraph Company* v. *Brett*, 10 C. B. 881).

'Where the thing is wholly novel, and one that has never been achieved before, the machine itself which is invented, necessarily contains a great amount of novelty in all its parts, and one looks very narrowly and very jealously upon any other machines for effecting the same object, to see whether or not they are merely colourable contrivances for evading that which has been done before.' (*Per Wood, V. C.*, in *Curtis* v. *Platt*, L. R. 3 Ch. 135 *n.*)

When the principle is not new, any patent taken out for a method of carrying it into effect is substantially confined to that method, and cannot be extended to other methods, because they involve some common principle applied to the common object, and may apparently be described by the same general phrase. Thus in *Barber* v. *Grace* (1 Exch. 339) it was held that the pressing of woollen goods by a set of rollers, heated within by steam, was not an infringement of a patent for a mode of pressing similar goods by two cast-iron boxes filled with steam. The jury found that the former was not a colourable variation of the latter process, and the Court, after argument, approved of the finding.

In the case of interfering patents, the following rule was laid down by *Pollock, C. B.*, in *Bush* v. *Fox* (Macr. P. C. 165): 'Whenever it appears that the use of a prior patent invention would be an infringement of a subsequent patent, the second patent cannot be sustained.' See also *Thomas* v. *Foxwell* (5 Jur. N. S. 39), and *Betts* v. *Menzies* (1 Ell. & Ell. 1020).

In *Saxby* v. *Hennett* (L. R. 8 Ex. 210) it was held that where two patents are in existence for the same invention, acts done under the patent of later date are infringements of the earlier patent.

In considering the operation of a patent obtained for an object similar to that of a patent previously granted to another inventor, care should be taken to discriminate cases that are sometimes insufficiently distinguished, although their consequences are very different. The invention under the latter patent may comprise an improvement upon a prior patented invention; or it may be only a variation of the means there adopted to effect the given object; or it may be a distinct method of attaining a common end. With respect to the first of these cases, it is well established that a person is at liberty to patent an improvement upon an invention which forms the subject of an existing patent, without rendering himself liable for an infringement; but he will not be able to use the improved invention before the expiration of the earlier patent unless he obtains the licence of the patentee (*Lister* v. *Leather*, 8 E. & B. 1004). In the second case, the later patent never had any validity whatever, on account of its being an invention already published, and therefore destitute of novelty, though disguised by colourable alterations. Besides this, it is an illegal imitation of another man's invention, which it endeavours to evade. These points have been sufficiently discussed elsewhere in this volume. In the third case, since the inventions, that is, the means

employed, are distinct, although the object is the same, the patents stand independently one of the other, provided that the earlier patent does not cover the principle common to the two, and is limited to the particular combination or method. Identity of object must not be mistaken for identity of means. The doctrine of mechanical equivalents is not applicable here. The whole apparatus may be nothing more than a particular mode of attaining a certain end, and if one man is entitled to a patent for one road to that end, any other person is on the same ground entitled to a patent for another road to the same end. For example, it had been long known that if grain were kept cool during the process of grinding, the flour was of superior quality. To effect this desideratum various contrivances had been adopted, and several patents had been obtained for them, before Bovill obtained one for an invention consisting of the application of ventilating vanes or screws at the centre of the grinding-stones, by which means air was supplied between the grinding surfaces. A portable ventilating machine, blowing in a screw vane, which caused a flow of air parallel to the axis of the vane, was attached externally to the eye of the upper millstone. When the screw vane was set in motion, air was compelled to pass through the eye of the upper millstone into the centre of the two stones, and found its way out between them. Pimm subsequently took out a patent for improvements in grinding wheat. His plan for keeping the grain cool whilst grinding consisted in the removal from the centre of both stones of a large circular portion, and in the space thus obtained to place a fan, by the rapid rotation of which a centrifugal motion was given to the air, and it was driven between the stones. It was held that the latter method was no infringement of Bovill's; the two inventions were deemed independent original improvements, and

each inventor was entitled to protection in respect of the method disclosed in their respective specifications, but could not claim beyond the method actually described (*Bovill* v. *Pimm*, 11 Exch. Rep. 718).

And again in *Curtis* v. *Platt* (L. R. 3 Ch. D. 135 *n.*), *Sir W. P. Wood, V. C.*, said: 'When the object itself is one which is not new, but the means only are new, one is not inclined to say that a person who invents a particular means of doing something that has been known to all the world long before, has a right to extend very largely the interpretation of those means which he has adopted for carrying it into effect. Because, otherwise, that would be to say that the whole world is to be precluded from exercising its invention for achieving some desirable and well-known object which everybody has had in view for years. One looks more jealously at the claims of inventors seeking to limit the rights of the public at large for effecting that which has been commonly known to all the world long ago. Of course no patent can be taken out for effecting this as a new object, but only for effecting it by a new means. What those means may be, and what is the extent of the claim which the patentee has a right to insist upon as to those means, is often a matter of much difficulty.' See also *Saxby* v. *Clunes* (43 L. J. Ex. 228); *Dudgeon* v. *Thomson* (L. R. 3 App. Ca. 34).

When there are several distinct heads of invention, an infringement of any one renders the infringer liable to legal proceedings (*Gillett* v. *Wilby*, 1 W. P. C. 271).

COMBINATIONS.

With regard to the infringement of patents obtained for a general arrangement and combination of numerous parts, all of them old, or some old and some new, the whole in either case forming a new apparatus or

machine, questions of some complication may arise, and it may not be easy to decide in a given case whether what has been done amounts to an infringement or not. A patentee may assert that although his invention as described in the specification has not been exactly copied by another person part by part, yet sufficient has been taken to bring it within the reach of the law and render him liable as an infringer. In other words, that the differences are merely colourable, and that the inventions specified by the patentee and practised by the defendant are substantially identical. On the other hand, the alleged infringer may aver that what he has done, though directed to the same object and producing the same result, has been effected by means that were open to all the world, and that if the means employed by him are to a certain extent similar to those employed by the patentee, they yet differ so far as to render his process or apparatus a distinct and independent method of arriving at a common end, and do not constitute an illegal copy or evasion of the patentee's method. These opposite views may both be supported by witnesses of equal weight and credibility, and thus a very difficult question of fact may be placed before a jury or submitted to the decision of a judge. Those upon whom may devolve the duty of deciding a controversy of this nature will anxiously seek to discover on which side lies the preponderance of probability after hearing the whole case.

The contention, however, often turns upon a narrow question. It is admitted that the defendant has not attempted to take the entire combination, but he is charged with having taken a part of it; if so, has he infringed the patent? Of course he cannot incur liability for borrowing a part that was old, but if the part taken was new, is not he open to an action for

infringement? We will give a series of reported cases bearing upon this point, and from these it will be seen that there is often great difficulty in applying the law to the facts of particular cases.

When *Clark* v. *Adie* was taken to the House of Lords (L. R. 2 App. Ca. 335) *Lord Blackburn* said, 'I incline to agree with what was said by the Exchequer Chamber in the case of *Lister* v. *Leather*, that you cannot decide in the abstract whether the using of two parts A and B of a combination A B and C is or is not using part of that invention, nor can you decide in the abstract the other question whether or no the specification shows that A or B is sufficiently claimed as a part of the invention or not. I do not think that either of those questions can be decided in the abstract. I would wish like the Exchequer Chamber in *Lister* v. *Leather*, before deciding, to have before me the nature of the machine, in order that I might see what A B and C are, and what is their relation to each other.'

'Where the invention' (said *Alderson*, *B.*, in the case of *Newton* v. *Grand Junction Railway Co.*, 5 Exch. 334) 'consists partly of what is old and partly of what is new, the combination is the subject of the patent. Therefore, a person cannot infringe that part of the patent which is old, because the public cannot be prevented from using that which they had before used in that state.[1] If the invention consists of something new, and a combination of that with what is old, then, if an individual takes for his own, and uses that which is the new part of the patent, that is an infringement of it.' See also *Smith* v. *London and South-Western Railway Co.* (Macr. P. C. 203), and *Smith* v. *London and North-Western Railway Co.* (2 E. & B. 69). And in the case of *Bovill* v. *Keyworth* (7 E. & B. 725), the

[1] See also the observations of *Martin*, *B.*, in *Newall* v. *Elliott* (10 Jur. N. S. 954; *S. C.* 13 W. R. 11).

Court said: 'Supposing the patent to be for a combination consisting of several parts for one process, we are of opinion that the defendants are liable in this action' (which was brought for an alleged infringement of the plaintiff's patent for grinding grain) 'for having used a material part of the process, which was new, for the same purpose as that mentioned in the specification, although they did not at the same time use all the parts of the process specified.'

In the case of *Sellers* v. *Dickenson* (5 Exch. Rep. 312), *Pollock, C. B.*, said: 'The argument addressed to us was, that this is a patent for a combination of old and new mechanism, and the defendant not having used the combination, there can be no infringement. But that is not so. There may be an infringement by using so much of a combination as is material; and it would be a question for the jury, whether that used was not substantially the same thing. . . . I think it may be laid down as a general proposition . . . that if a portion of a patent for a new arrangement of machinery is in itself new and useful, and another person, for the purpose of producing the same effect, uses that portion of the arrangement, and substitutes for the other matters combined with it another mechanical equivalent, that would be an infringement of the patent.'

The case of *Lister* v. *Leather* (8 E. & B. 1004; *S. C.* in error, *ibid.* 1032) arose out of the alleged infringement of a patent for a carding machine obtained by the plaintiff in 1850. At the trial of the action the evidence was strong to show that a material part of the process used by the defendant was identically the same as that specified by the plaintiff, and that the combination of mechanism used by the defendant for performing a certain part of the process was essentially the same as that described in the plaintiff's specification. *Lord Campbell,* before whom the case was tried,

told the jury that the plaintiff's patent was for the whole combination, for the whole process as specified, but that the defendant might be guilty of an infringement without using the whole combination. Objections were taken to this ruling, and it was argued in the Court of Error that the taking of a part is either no infringement of a patent for a combination, or if it is, the patent for the combination is void unless every part is new. 'But,' said *Lord Campbell*, in delivering the judgment of the Court, 'all the points made for the defendant here were made and overruled in the three cases which decide that a patent for a whole combination may be infringed by taking a part, provided that is a new and material part of the combination.' His lordship then proceeded to comment on the cases of *Sellers* v. *Dickenson*, *Newton* v. *Grand Junction Railway*, and *Smith* v. *London and North-Western Railway Co.*, cited above, and continued:—'The principle in all these cases is the same as that laid down to the jury in the present case, and they establish that a valid patent for an entire combination for a process gives protection to each part thereof that is new and material for that process, without any express claim of particular parts, and notwithstanding that parts of the combination are old.'

In *The Bottle Envelope Co.* v. *Seymer* (5 Jur. N. S. 174, C. P.), it was said by the Court that the infringement of any part of a patent process is actionable if that part is of itself new and useful, so as that it might be the subject-matter of a patent, and is used by the infringer to effect the object or part of the object proposed by the patentee. And in *Parkes* v. *Stevens* (L. R. 8 Eq. 358), *James*, *V. C.*, held that a patent for a combination will not cover any part which would not be of itself patentable. In deciding this case the learned judge made these remarks on the case

of *Lister* v. *Leather*, cited above: 'The authority of that case has been pressed upon me as if it really established this, which would be a most startling proposition, that a patent for a combination or arrangement would be a distinct patent for everything that was new and material, and that went to make up the combination. The marginal note, if read hastily, is calculated to give some colour to that contention. But if the judgment be read it will be found to give no warrant whatever for such, I must call it, baseless notion. . . . . It was contended (in the case before the judge) that because it (a sliding door) was as alleged a novel part of a novel combination (forming a lamp), it was protected. To say that a patent for an entire combination is a valid patent for a part when that part would not of itself have been patentable is in my judgment a *reductio ad absurdum* of the supposed principle in *Lister* v. *Leather*.'

The case of *Saxby* v. *Clunes* (43 L. J. Ex. 228), arose out of the alleged infringement of a patent for a mode of working the points and signals of railways. When it went on appeal to the House of Lords, *Lord Chelmsford* said that although the defendant's invention was a great improvement upon the plaintiff's, yet if, in carrying it out, the former made use of any part of the invention to which the plaintiff's patent extended, and which was new and material, it was an infringement. See also the case of *White* v. *Fenn* (15 W. R. 348).

It was decided in a case where the patentee's combination consisted of three old mechanical parts, that another person might use two of those parts and substitute hand-power for the third, *Murray* v. *Clayton* (L. R. 10 Ch. 675 *n.*)

In the case of *Harrison* v. *Anderston Foundry Co.* (L. R. 1 App. Ca. 574), *Lord Cairns, L. C.*, said:

'If it is clear that the claim is for a combination and nothing but a combination, there is no infringement unless the whole combination is used, and it is in that way immaterial whether any or which of the parts are new.' And in the same case *Lord Chelmsford* said: 'If a patent is solely for a combination nothing is protected by it, and consequently nothing can be infringed but the use of the entire combination.' See also *Dudgeon* v. *Thomson* (L. R. 3 App. Ca. 34), and the remarks of Sir G. Jessel, M.R., in *Townsend* v. *Haworth* (L. R. 12 Ch. D. 837 *n*).

When the case *Clark* v. *Adie*, which arose out of an alleged infringement of a patent for improvements in apparatus for clipping horses, was taken on appeal to the House of Lords (L. R. 2 App. Ca. 315), *Lord Cairns, L. C.*, made the following general remarks on infringements of patents for inventions of this nature: (1) 'One mode of infringement would be a very simple and clear one; the infringer would take the whole instrument from beginning to end, and would produce a clipper made in every respect like the clipper described in the specification. About an infringement of that kind no question could arise.' (2) 'The second mode would be one which might occasion more difficulty. The infringer might not take the whole of the instrument, but he might make an instrument which in many respects might resemble the patented instrument, but would not resemble it in all its parts. And there the question would be, whether that which was done by the alleged infringer amounted to a colourable departure from the instrument patented, and whether in what he had done he had not really taken and adopted the substance of the instrument patented.' (3) 'But there is a third way in which it is possible to conceive an infringement of a patent of this kind. Inside the whole invention there may be that which in

itself is a minor invention, and which does not extend to the whole, but forms only a subordinate part or integer of the whole. Now again, that subordinate integer may be a step or a number of steps in the whole, which is or are perfectly new ; or the subordinate integer may not consist of new steps, but may consist of a certain number of steps so arranged as to form a novel combination within the meaning which is attached by the patent law to the term " combination." . . . In a patent of that kind the monopoly would or might be held to be granted not only to the whole and complete thing described, but to those subordinate integers entering into the whole which I have described. But then the invention must be described in that way; it must be made plain to ordinary apprehension upon the ordinary rules of construction that the patentee has had in his mind and has intended to claim protection for those subordinate integers.' Proceeding to apply these principles to the case before the House his lordship said: 'I cannot find from beginning to end of the specification any sentence or any number of sentences, as to which, by any reasonable interpretation, you can say that they may make a claim to a subordinate combination of these particular items as constituting in itself a novelty, a new manufacture, a thing to be protected by the patent.'

The preceding cases seem to establish the following propositions. If the claim is solely for a combination, there is no infringement, unless the entire combination is taken. To protect subordinate parts or minor combinations, it is necessary to claim them, even when new and material. Subordinate parts and minor combinations when claimed must be new, useful, and patentable *per se*.

When, however, it is laid down that to constitute

an infringement of a combination the entire combination must be taken, the proposition must be understood in this sense, that if the substance of the combination is borrowed there will be an infringement although all the details of the invention as described by the patentee may not have been taken. It is a clear principle in patent law that a person cannot borrow some substantial part of that which as a whole is a useful invention and thereby take the benefit of it without rendering himself liable for an infringement.

In *Parkes* v. *Stevens* (L. R. 8 Eq. 358), *James, V. C.*, stated the law on this branch of the subject as follows: 'The law is summed up thus; the cases establish that a valid patent for an entire combination for a process gives protection to each part thereof that is new and material for that process, which is nothing more than stating in other words that you not only have no right to steal the whole, but you have no right to steal any part of a man's invention; and the question in every case is a question of fact—is it really and substantially a part of the invention? Supposing that a clock was now for the first time invented and patented as a machine for measuring and indicating time, a man could not evade the patentee's right by substituting a spring for a weight, or by leaving out the whole of the striking apparatus.' See also *Walton* v. *Potter* (1 W. P. C. 586) and *Thorn* v. *Worthing Skating Rink Company* (L. R. 6 Ch. D. 415 *n.*)

The case of *Lister* v. *Leather* (said *Lord Penzance* in *Harrison* v. *Anderston Foundry Co.*, L. R. 1 App. Ca. 574), decided nothing more than this, that though the patent is for a combination it does not follow that there can be no infringement of it, unless every part of that combination without exception is pirated. What the Court said was that the taking of a subordinate part or parts of the combination *might* be, not that it

necessarily would be, an infringement of the patent; and that whether it would be so or not depended, as the Court of Error said, 'upon what the parts taken were, how they contributed to the object of the invention and what relation they bore to each other.' This only amounts to saying that on a question of infringement the essential nature of the invention will be regarded; and that there may be cases in which, though the patent is for an entire combination of numerous parts, a collusive imitation of that invention may be effected, though some detail of the combination is omitted or changed, which is a doctrine familiar enough in patent law.

In *Flower* v. *Lloyd* (W. N. 1877, p. 132), it was held by the Court of Appeal that in order to constitute an infringement of a patent for a combination there must be an infringement of the whole combination, not in the sense that every step of the combination must be adopted, but that there must be an adoption of that which constitutes the essence of the combination.

The plaintiffs were the owners of a patented transmitting instrument for telephonic purposes. It was composed of several parts, the outermost being a mica diaphragm for receiving the vibrations of the voice, under which was placed a slice of cork, and under the cork was a piece of platina foil. In a box below the platina was the substance which served as a tension regulator. After this combination had been patented it was discovered that the instrument would act without the mica and the cork. The defendants having made and sold instruments similar to those manufactured under the patent, except that the mica and cork were left out, it was held that they were liable for an infringement. (*United Telephone Company* v. *Harrison*, L. R. 21 Ch. D. 720.)

'I understand the rule to be that if a man uses a part of that to which the patent applies for the purpose for which the patentee intended it, and for which he has taken out his patent, and the difference is unsubstantial or colourable, the use of it is an infringement. See *Newton* v. *Grand Junction Railway Co.* 5 Exch. 331.' (Per *Mr. Justice Field* in *Burnett* v. *Tate*, Q. B., April 27, 1883.)

When a patent is for a new combination of machinery, every part being old, it may be that the manufacture of the separate parts in this country, and the exportation of them abroad, will be no infringement; but in *Goucher* v. *Clayton* (11 Jur. N. S. 462, 465) it was held to be otherwise when the part so made and exported is new and is claimed as new.

CHEMICAL PROCESSES AND PRODUCTS.

Precisely the same rules of law are applicable to the case of chemical as to the case of mechanical inventions. The chief questions will continue to be, Has the new principle discovered and applied by the patentee, or his new method of carrying out a known principle, or his new combination of parts or ingredients, been borrowed by the alleged infringer?

In *Stevens* v. *Keating* (W. P. C. 2, 188) it was a question whether the use of borax (a compound of boracic acid and soda) was not an infringement of a patent, the specification of which claimed the use of acids and alkalies in the preparation of cements. Both *Lord Cottenham* and *Pollock*, *C.B.*, held that it was an infringement.

In *Hancock* v. *Moulton* (June 1852), an application in the Court of Chancery for an injunction to restrain the manufacture by the defendant of vulcanised or cured caoutchouc, alleged to be an infringement of the

plaintiff's patent, it appeared that this patent was for obtaining a certain useful product by subjecting a mixture of sulphur and caoutchouc to heat. The mixture was first made mechanically, and then, by the operation of heat, the character of the caoutchouc was changed so that it ceased to be liable to stiffen from cold, it was not decomposed by heat, and it was improved in elasticity. The patent extended to the incorporation of sulphur, and of sulphur only, with the caoutchouc by means of heat. The defendant subsequently obtained a patent for the combination of hyposulphate of lead and artificial sulphuret of lead with caoutchouc; that combined mass, acted upon by heat, was alleged by the defendant to produce more beneficial results, but the results were of the same character as those which were produced by the plaintiff's patent. 'Assuming,' said *Turner*, *V. C.*, 'the materials thus used by the defendant to be different, the process of the defendant would *per se* be no infringement of the plaintiffs' patent. The plaintiffs confined their patent to sulphur: the defendant had used hyposulphate of lead and artificial sulphuret of lead. But it was alleged by the plaintiffs that the materials were not in truth different, or at least that the materials which produce the result are the same. It was said that sulphate and sulphuret of lead do not of themselves produce the change, but that the change is produced by the sulphur which they contain, and which forms one of their several constituent parts; and that those parts being decomposed by heat, the sulphur combined with the caoutchouc and left a residuum of lead, which had no operation in the change which was effected. If the qualities conferred upon the caoutchouc by the process were imparted by the sulphur, it would no doubt be an infringement of the plaintiff's patent.' The judge's opinion, after examining the evidence, was, that the

evidence preponderated very considerably in favour of the plaintiffs.

The case of *Talbot* v. *Laroche* (15 C. B. 310) deserves attentive study for the questions raised in it as to the substitution of one chemical equivalent for another. The plaintiff was the inventor of a photographic process, patented in 1841. The specification claimed, amongst other things, the employment of gallic acid or tincture of galls, in conjunction with a salt of silver, to render paper more sensitive to the action of light; and also the making visible photographic images upon paper by washing them with liquids (meaning only, as other parts of the specification showed, gallo-nitrate of silver), which act upon those parts which had been previously acted on by light. Subsequently to the date of this patent, the collodion process was discovered, and the defendant having practised it, the plaintiff brought this action, alleging that this process was an illegal copy of his process. It was argued by the defendant—firstly, that the plaintiff had claimed only the rendering of *paper* more sensitive to light; whereas collodion, the substance he employed, was a different thing, being a solution of gun-cotton in ether; secondly, that when the collodion was put into the camera, it contained no gallic acid, a material essential to the plaintiff's process: thirdly, that in developing the image, he employed pyrogallic acid, and not gallic acid. Several scientific persons gave evidence that collodion was not only a different material from paper, calling into play processes not needed when paper was employed, but that it possessed peculiar photographic properties, as was proved by the fact that no gallic acid was required to render it sensitive, as in the case of paper; also, that pyrogallic acid was much more rapid in its action than gallic acid, and that it was, in many respects, a different thing from gallic acid. The questions

submitted by the judge to the jury upon this part of the case were these: Is the use of collodion with nitrate of silver and iodide of potassium the same as the use of paper prepared with nitrate of silver, iodide of potassium, and gallic acid? Is pyrogallic acid the same as, or a chemical equivalent for, gallo-nitrate of silver? The jury returned a verdict implying that, in practising the collodion process, the defendant had not infringed the plaintiff's process.

The difficulty that sometimes exists in determining whether one chemical process is, in contemplation of law, distinct from, or an illegal copy of another, is exemplified in the history of the case of *Heath* v. *Unwin*.

Under a patent for improvements in the manufacture of iron and steel, the patentee claimed 'the use of carburet of manganese in any process whereby iron is converted into cast steel;' and his specification stated, that the invention consisted in adding from one to three per cent. of the carburet to iron or blistered steel whilst in the crucible. The carburet of manganese was separately prepared, by subjecting oxide of manganese and carbonaceous matter to a strong heat, and the resulting carburet was then added to the crucible containing the metal to be converted into cast-steel. Upon the trial of an action for an infringement, it appeared that the defendant did not use any single substance answering to the description of carburet of manganese; but he placed in the crucible containing the iron or blistered steel some oxide of manganese and carbonaceous matter. These two substances would form during the process of conversion, and before actual union with the melted iron, carburet of manganese in a state of fusion; but the quantity of the carburet so formed was less than one per cent. of the weight of iron in the crucible. It was held by the Court of Exchequer, that

since the defendant had not contemplated the use of carburet of manganese, and had not known prior to the investigation that took place in consequence of the action, that the result of his adding the oxide and carbon was to produce the carburet—since, moreover, the patentee had expressly stated his invention to be the addition of the substance called carburet of manganese to the crucible, there was no infringement on the part of the defendant, for there was no imitation of the patentee's process behind a colourable variation. The specification was construed as claiming the use of one particular combination of carbon and manganese, namely, the carburet of that metal; and a particular mode of using that combination, namely, by putting a certain quantity by weight, in an unmelted state, into the crucible.

Heath v. *Unwin* subsequently went before the Court of Exchequer Chamber. A majority of the judges of that Court held that, inasmuch as the plaintiff had not limited his claim to the particular mode of using the carburet described in his specification, the defendant's process was an infringement of the patented invention, since it effected the manufacture of cast-steel by the employment of either carburet of manganese or a chemical equivalent. A minority of the judges thought that the defendant had not infringed the patent; for, though he had used a chemical equivalent for the carburet of manganese—viz. its component parts—it was not known at the date of the patent that such component parts were equivalent to the carburet, in such special applications of it as were described in the specification, and for the purpose there mentioned. Moreover, they thought that the defendant's process was an improvement upon the plaintiff's, for the same quality of steel was made at less expense, one crucible and one heating effecting the desired result.

When this extraordinary case came before the House of Lords, the judges were called upon to attend the argument, and give their opinions. Eleven judges attended, seven of whom concurred with the Court of Exchequer Chamber, and four disagreed. Notwithstanding this large majority, the two law lords who heard the case (*Lord Cranworth* and *Lord Brougham*) gave judgment for the plaintiff in error, thereby deciding that Heath's patent had not been infringed. 'I think,' said *Lord Cranworth*, 'that the use of substances thus producing carburet of manganese in a state of fusion was no violation of the patent. The substance for the use of which (*inter alia*) the patent was granted was a solid metallic substance capable of being broken into fragments and weighed, so that certain definite quantities might be put into the crucible with the steel. There is no evidence whatever tending to prove that, at the date of the patent, it was known to persons acquainted with the subject of manufacturing steel, that coal-tar and oxide of manganese would be a chemical equivalent for the carburet of manganese claimed by Heath. Indeed it is obvious that the discovery of such an equivalent was made after the use of the carburet as a distinct metallic substance had been some short time in operation. It was itself a most valuable discovery, and would have legitimately formed the subject of a new patent. The costly nature of the substance claimed in the patent might, and probably would, have prevented its use altogether; and if, at the date of the specification, it was known to Heath, that by the use of two common substances, well known in commerce, more than one hundredfold cheaper than carburet of manganese, the same results precisely would be obtained as by the use of that material, the specification would have been bad, as not truly disclosing the invention. On the short ground,

therefore, that the invention claimed is for the use of a particular metallic substance, viz. carburet of manganese in certain definite proportions, according to the weight of the steel under fusion, and that no such substance, nor any equivalent for it, known to be such at the date of the specification, was used by the defendant, I think that there was no evidence of infringement' (5 H. L. C. 505, 543).

On the trial of *Muntz* v. *Foster* (2 W. P. C. 96), an action brought for the infringement of a patent for an improved manufacture of metal plates for sheathing the bottoms of ships, it appeared that the patentee claimed the invention of an alloy of 60 per cent. of copper and 40 per cent. of zinc—the copper and zinc being of the best quality—which alloy could be rolled at a red heat into sheets that furnished a sheathing for ships which was more durable, under the corrosive action of salt water, than copper sheathing; whilst it oxidated sufficiently to keep the ship's bottom clean from barnacles and other things that impeded the ship's progress. A patent had been obtained in 1800, by one Collins, for a preparation of sundry materials, to be used chiefly for the preservation of shipping or for marine purposes, the specification of which described, amongst other things, a mixture of 100 parts copper and 80 parts zinc—*i.e.* 55½ per cent. of copper and 44½ per cent. of zinc—which was to be extended into proper form by rolling. The two inventions, on their faces, seemed to be substantially the same, but the following arguments were used to prove a difference. Collins stated that other metallic substances might be added to the alloy of copper and zinc; whereas Muntz alleged that foreign ingredients would destroy the value of his composition. Collins stated that a good composition might be made of 55½ per cent. of copper and 44½ per cent. of zinc; whereas Muntz alleged that 60 per cent.

of copper and 40 per cent. of zinc were the precise proportions required to produce the best metal for sheathing, and that a variation of one or two parts of copper or zinc, on one side or the other, made a very material difference in the result. Again, it was alleged on the part of Muntz, that, at the time of Collins' invention, neither copper nor zinc existed of the purity required for the successful production of an alloy as suitable as Muntz's for ship-sheathing; and that before his invention it was not possible to obtain a metal which would roll hot or cold, and could at the same time serve for sheathing. The defendants alleged, that the sheathing made by them was the result of following the directions of Collins' specification. (As to this part of the case, however, *Lord Lyndhurst*, on the hearing of an appeal from an order of *Knight Bruce, V. C.*, said he was satisfied that the object could not be accomplished by uniting ordinary copper and zinc according to Collins' process. The defendants must, therefore, have originally used, not the ordinary, but the purest quality of the two metals, or they must have purified them in the course of the process by some mode not suggested in Collins' specification. In one case the invasion of Muntz's invention was plain and direct; in the other it was colourable and indirect.) Furthermore, witnesses stated that no person could make the compound material by following Collins' directions. The jury found a verdict for the plaintiff, the judge having taken a favourable view of Muntz's case in his address to the jury.

A man may invent improvements on a patented chemical process, by which improvements he may produce a better result in a simpler manner at less cost and with less waste, but if these are effected by equivalent operations known to be equivalent at the date of the patent, he will be deemed an infringer if he puts them

in practice. Thus in the case of the *Badische Anilin und Soda Fabrik* v. *Levinstein* (Ch. D. June 27, 1883), an action brought for the infringement of a chemical patent, *Mr. Justice Pearson* said: 'The processes employed by the defendant are processes deserving of great praise, but they are simply processes which produce exactly the same results from the same materials which are produced under the patent. The same object is pursued, the same materials are employed, the same result is obtained. I cannot do otherwise than come to the conclusion that these processes are not an invention differing from the patented one.'

In those cases where the invention consists of the employment of a material composed of several ingredients, and the inventor has stated the most suitable proportions known to him, another person will not be allowed to evade the patent by employing somewhat different proportions. (*Patent Type Founding Company* v. *Richard*, Johns. 381.)

INFRINGEMENT BY DEALING IN ARTICLES MADE BY INFRINGING A PATENT.

The sale by a dealer of articles made in infringement of a patent is itself an infringement, and it is not necessary for the patentee to prove that the dealer was aware of the articles having been surreptitiously made by a patented process (*Wright* v. *Hitchcock*, 5 Ex. 37; *Davenport* v. *Rylands*, L. R. 1 Eq. 303). And this is so whether such articles have been made in this country or have been imported from abroad (*Walton* v. *Lavater*, 8 C. B. N. S. 162; *Elmslie* v. *Boursier*, L. R. 9 Eq. 217; *Von Heyden* v. *Neustadt*, L. R. 14 Ch. D. 230; *Burnett* v. *Tate*, Q.B., April 27, 1883; *La Société Anonyme des Manufactures de Glaces* v. *Tilghman's Patent Sand Blast Co.*, L. R. 25 Ch. D. 1). This will be so even

where the persons importing the patented articles are the licensees under a foreign patent obtained by the same inventor for the same invention as that secured by the British patent (see the two last cited cases). The circumstances, however, may be such that the patentee is bound to prove not only the sale, but that the article was not made and sold by himself or his agents (*Betts* v. *Willmott*, L. R. 6 Ch. 239; and see observation of *Cotton, L. J.*, on this case in *Société Anonyme, &c.* v. *Tilghman, &c. Company*, L. R. 25, Ch. D. 1). In this case, a patentee having manufactories both in England and on the Continent, filed a bill against a druggist to restrain him from infringing his patent for metallic capsules, the infringement consisting of the sale of a bottle of French toilet vinegar having a capsule attached similar to those manufactured under the patent, but the bill was dismissed (and on appeal *Lord Hatherley, C.*, upheld the Vice-Chancellor's decision) on the ground that the plaintiff had not shown that he had not himself sold through his house in Paris the very article the use of which he sought to prohibit. A sale of the article by the patentee in one country would imply a right to use it in another.

Proof of the sale of an article shown to have been made in the same way as that for which a patent has been obtained, such sale being without the leave, expressed or implied, of the patentee, is *primâ facie* evidence of an infringement (*Gibson* v. *Brand*, 1 W P. C. 630). But there must be proof that the article was made according to the patented method. Thus on the trial of an action for an infringement, a candle with a plaited wick, made by the defendant and sold at his manufactory, was produced to the jury as evidence that he had infringed the patent. It was held that, as the patent was not for the candle itself, but

for the mode of manufacturing it, the mere production of a candle similar to the plaintiff's was no evidence that it had been made by his patented method. It should have been shown how the candle had been made, seeing that it was quite possible the same result had been produced by a different method (*Palmer* v. *Wagstaff*, 8 Exch. 840; 9 Exch. 494).

But in *Huddart* v. *Grimshaw* (1 W. P. C. 91) it was held that the production of pieces of rope having the essential qualities of the patented article was *primâ facie* evidence of infringement. And in *Hall* v. *Boot* (1 W. P. C. 186) it was held that the sale of an article, which might during manufacture have been improved according to a patented process coupled with the fact of the necessary machine being in the defendant's possession, was sufficient evidence of infringement. (See also *Davenport* v. *Richards*, 3 L. T. N. S. 504.)

The point whether a mere exposure or offering for sale of a patented article amounts to an infringement, in the absence of proof of actual sale, seems to have been decided differently in the cases of *Minter* v. *Williams* (1 W. P. C. 137) and *Oxley* v. *Holden* (5 C. B. N. S. 667). In *Muntz* v. *Foster* (2 Web. P. C. 101), *Tindal, C. J.*, held that the making of ten tons of metal sheathing was an infringement, although no sale was proved.

In *Speckhart* v. *Campbell* ('Times,' March 13, 1884) it was held by the Court of Appeal that the defendant who was domiciled in Scotland had committed an infringement in England of the plaintiff's patent by buying in London articles made in infringement of the patent, and advertising them for sale in Scotland; and by sending to a Liverpool firm, in exchange for postage stamps, samples of the article, accompanied by a letter stating the price per gross.

AGENTS.

Where an infringement is committed through an agent both employer and agent are liable; it being no justification for the agent to allege that he did the acts complained of by the order of his principal (*Gibson* v. *Brand*, 4 M. & G. 179; *Betts* v. *De Vitre*, 11 Jur. N. S. 9; *Sykes* v. *Howarth*, L. R. 12 Ch. D. 833).

INFRINGEMENT BY USER.

The user in this country of an article made abroad, but which is the subject of a British patent, is illegal, even when such user is merely of a passive nature, and takes place in the course of transit from one foreign country where the articles have been made to another to which they are consigned (*Betts* v. *Neilson*, 6 N. R. 221, affirmed on appeal, *ibid.* 361; 3 De G. J. & D. 82; L. R. 3 Ch. 431; L. R. 5 H. L. 1). In this case bottles of beer sent from Scotland protected by capsules made in contravention of an English patent were transhipped in an English port for convenience of exportation to India. It was held, first by *Wood*, *V. C.*, and afterwards by the Court of Appeal and the House of Lords, that as the capsules were necessary for the preservation of the beer, there had been a user of the invention in England, and an injunction was granted. But his Honour said he could well conceive a case in which there would be no user in England, as, for instance, foreign tools infringing an English patent, packed up in boxes and lying inert, or transhipped in course of transit in an English harbour (6 N. R. 222). And so in *Nobel's Explosives Co.* v. *Jones* (L. R. 17 Ch. D. 271), where the object of a patent in regard to a preparation of nitro-glycerine was to render it non-explosive with a view to its safe conveyance from place to place, it was held that the transhipment in an English port

of a quantity of nitro-glycerine prepared abroad according to the British patent was a user of the invention and an infringement of the patent. See also *Caldwell* v. *Van Vlissengen* (9 Hare. 415, 428), where the user was an active use.

But the doctrine of *Betts* v. *Neilson* will not be extended so as to allow an injunction to issue against persons who merely acted as Custom House agents for the importers of the patented articles. (*Nobel's Explosives Co.* v. *Jones*, L. R. 17 Ch. D. 721, affirmed in H. L. 8 App. Cas. 5.)

Where infringements have been committed both in England and Scotland by a defendant domiciled in Scotland, it was held by the Court of Appeal that the Court, in deciding in which country proceedings should be taken, will be guided by the particular circumstances of the case and the convenience of the parties. (*Speckhart* v. *Campbell*, 'Times,' March 13, 1884.)

The possession of articles made in infringement of a patent is sometimes enough to afford ground for an injunction without proving user, if the circumstances are such as to show that user is intended. An injunction was granted by V. C. Bacon against the master of a ship restraining him from using certain pumps constructed according to the plaintiff's patented invention and placed on board the vessel. The validity of the patent and the fact of infringement by the manufacturers of the pumps were established, but actual user of the pumps was not proved. The master, however, acted with the makers in asserting his right to use the pumps as against the patentee. It was held on appeal that the injunction was properly granted, *Adair* v. *Young* (L. R. 12 Ch. D. 13). On the general question of infringement by user see *The Universities of Oxford and Cambridge* v. *Richardson* (6 Ves. 689); *Minter* v. *Williams* (1 W. P. C. 137).

THE CROWN.

It was decided in the case of *Feather* v. *The Queen* (6 B. & S. 257) that as all grants made by the Crown must be construed favourably to the grantor and adversely to the grantee, there was nothing in the ordinary form of Letters Patent in use up to January 1, 1884, to debar the Crown from using the invention comprised therein, and consequently that the Crown had a right either by itself or by its officers, agents, or servants, to exercise such invention and manufacture the patented object without paying royalties or compensation.

However, in *Dixon* v. *The London Small Arms Company* (L. R. 1 App. Ca. 632), where a manufacturing company had entered into a contract with the Government for the supply of a patented article for the public service at a fixed price, and in pursuance thereof had manufactured the article without the patentee's licence, and delivered the same and received payment, it was held by the House of Lords that the manufacturers were not in the position of servants or agents of the Crown, although they had received an indemnity from the Government against the claims of the patentee; and therefore that they were not entitled to the privilege of the Crown against a patentee, but were liable to an action for an infringement of the patent. See also *Vavasseur* v. *Krupp* (L. R. 9 Ch. D. 351).

The case of *Feather* v. *The Queen* will still apply to patents granted before the commencement of the Patent Act of 1883 or on applications then pending (sect. 45) but by the twenty-seventh section of that Act a patent granted on an application made after the commencement of that Act shall have to all intents the like effect as against Her Majesty the Queen, her heirs and

successors, as it has against a subject. But the officers or authorities administering any department of the service of the Crown may, by themselves, their agents, contractors, or others, at any time after the application, use the invention for the services of the Crown on terms to be before or after the use thereof agreed on, with the approval of the Treasury, between those officers or authorities and the patentee, or, in default of such agreement, on such terms as may be settled by the Treasury after hearing all parties interested.

FOREIGN VESSELS.

By the forty-third section subs. (1) of the Patent Act of 1883, the use of an invention for the purposes of the navigation of a foreign vessel within the jurisdiction of Her Majesty's Courts in the United Kingdom or Isle of Man, or the use of an invention in a foreign vessel within that jurisdiction, shall not be deemed an infringement of any British patent obtained for such invention, unless it is used for the manufacture or preparation of something intended to be sold in or exported from the United Kingdom or Isle of Man. But by subs. (2) the first subsection is not to extend to vessels of any foreign state which does not show similar indulgence to British vessels under like circumstances.

Any case not coming under the protection afforded by the first subsection will be governed by the decision in *Caldwell* v. *Van Vlissengen* (9 Hare. 415), where an injunction was obtained to restrain the use on board of a Dutch vessel within British waters of certain propelling apparatus made according to a British patent.

CASES OF NON-INFRINGEMENT.

To construct a patented machine simply as an amusement or as a model is not an infringement of the

patent (*Jones* v. *Pearce*, 1 W. P. C. 125); nor is the making of the patented article for the purpose of *bonâ fide* experiment (*Frearson* v. *Loe*, L. R. 9 Ch. D. 48); and if a person makes use of a patented process and obtains the product, not for the purpose of commercial profit, he is not guilty of infringing the patent. Thus Higgs obtained a patent for a process of precipitating, by means of hydrate of lime, the animal and vegetable matters suspended in sewage water, with a view to their use as manures. Godwin employed the same process, but solely for the purpose of purifying the sewage water, and he derived no profit from the product. It was held that the patent was not infringed (*Higgs* v. *Goodwin*, E. B. & E. 529). But if the patented articles, though made only for experiment, are used for profit, or with a view of obtaining profit even to a limited extent, the patent will be infringed. Thus, where a defendant had made a screw-making machine in infringement of one patent, and in order to try the machine made a few screws of a description covered by another patent, and made such screws with the view of trying the screws themselves, he was held to have also infringed the latter patent (*Frearson* v. *Loe*, L. R. 9 Ch. D. 48).

It has been decided that the application of a new and material part of an arrangement to a purpose *different* from that to which it is applied in the patented combination does not infringe the patent (*Lister* v. *Eastwood*, 9 L. T. N. S. 766; *M'Cormick* v. *Gray*, 7 H. & N. 25).

In *Newall* v. *Elliott* (10 Jur. N. S. 954; *S. C.* 13 W. R. 11) a patent for an invention of improvements in apparatus employed in laying down submarine telegraph cables which consisted of an internal cone placed in the eye of the coil of cable, an external cylinder round the coil and rings suspended over it was held

not to have been infringed by an apparatus in which the cable was coiled round a cylinder and prevented from slipping by means of a cylinder placed outside, it being found that this had been done before for the purpose of safe carriage, and there being no evidence that the defendants used their apparatus for any other purpose.

The mere registration of a specification is not an infringement of a prior patent. It is the use of the earlier invention that constitutes the infringement. 'Where the invention is the mode of working or the mode of manufacturing an engine, there is no infringement until another engine is worked or made in the same way. Upon the question of infringement, the specification of the defendant (the alleged infringer) is of very little importance, Per *L. J. Brett* in *Otto* v. *Linford* (46 L. T. N. S. 35).

The application of a natural mineral substance to effect a given purpose is not an infringement of a patent obtained for the application to the same purpose of an artificial substance having the same chemical constitution. A patent was obtained for a process of purifying coal gas by means of hydrated oxide of iron, and the method of obtaining that material artificially was described in the specification. The use for the same purpose of a natural substance called bog ochre, containing oxide of iron, was held not to be an infringement of the patent. The specification also described and claimed a mode of revivifying the artificial oxide for subsequent use in the same way. *Lord Westbury, C.*, granted an injunction to restrain the user of the natural substance after it had been revivified by the process described in the patent. (*Hills* v. *Liverpool Gas Light Company*, 9 Jur. N. S. 140.)

It is not an infringement of a patent to sell chemical substances, knowing that the buyer intends to use

them in infringing the patent. Nor is it an infringement for the seller, in consideration of the purchase, to indemnify the buyer against proceedings by the patentee, if the patent is disputed or likely to be so. If buyer and seller know the patent to be valid, an agreement for indemnity would be void as being against public policy, and the seller would not be guilty of infringement. (*Townsend* v. *Haworth*, L. R. 12 Ch. D. 826 *n.* before *Sir G. Jessel, M. R.*, 1875, whose judgment was affirmed by the Court of Appeal. Appendix to Mr. C. Higgins's *Digest of Patent Cases*, 1880, p. 60. And see *Sykes* v. *Howarth*, L. R. 12 Ch. D. 831.)

A patent for the United Kingdom will not be infringed by acts done on board a British vessel at Malta or on the high seas. (*Newall* v. *Elliott*, 4 N. R. 429.)

A right of property in an article made in infringement of a patent remains in the maker or his assignee, notwithstanding the patentee's privilege and remedies; and therefore, where a foreign sovereign had bought abroad articles made in infringement of an English patent, and they were brought to England to be placed on board a ship of war belonging to the foreign sovereign, it was held that, as the Court had no jurisdiction to interfere with the property of a foreign sovereign, it could not prevent him from removing the articles in question (*Vavaseur* v. *Krupp*, L. R. 9 Ch. D. 351).

INTENTION OF INFRINGER NOT MATERIAL.

In determining the question of infringement, the *intention* of the infringer is immaterial; if he violate the patentee's rights he renders himself liable to make compensation, although he acted in ignorance. In the case of *Stead* v. *Anderson* (2 W. P. C. 156), *Wilde*,

C. J., when delivering the judgment of the Court of Common Pleas, said that, 'in the action of *Heath* v. *Unwin*, the Court of Exchequer seems to have deemed it material to consider the intention of the defendant in determining whether he had infringed a patent. But in that case the evidence negatived any such intention, and the other circumstances of the case were not such as to show an infringement; so that there was no evidence as to what the effect of such intention would be, and we think it clear that the action is maintainable in respect of what the defendant does, not what he intends.' And *Shadwell, V. C.*, said, in *Heath* v. *Unwin* (15 Sim. 553): 'I am at a loss to see how the want of intention can be any answer where the act complained of is an injury. The party complaining of the act is not the less prejudiced by it because it was committed unintentionally, and my opinion is that if a party has done an act that is injurious to the rights of another (though without any intention of doing him an injury) he is answerable for the consequences.'

In a subsequent stage of the case of *Heath* v. *Unwin* it was admitted by Mr. Baron Parke that the Court of Exchequer had been in error when it took the intention of the alleged infringer into consideration, adding, 'There may be an indirect infringement as well as a direct one, though the intention of the party be perfectly innocent, and even though he may not know of the existence of the patent itself' (25 L. J. C. P. 19). See also *Wright* v. *Hitchcock* (L. R., 5 Exch. 37), and *Davenport* v. *Rylands* (L. R. 1 Ch. D. 303). Nor can a master of workmen protect himself by alleging that the infringement was committed by them against his orders, *Betts* v. *De Vitre* (3 Ch. D. 430). But where a retail dealer had, in ignorance of the plaintiff's rights, sold to an agent of the plaintiff an article made in

infringement of the patent, and the article itself showed from whom its vendor had bought it, and the Court was satisfied that the infringement was innocent, accidental, and trivial, and not such as to have produced any substantial damage to the plaintiff, *James, V. C.*, dismissed a bill for an injunction (*Betts* v. *Willmott*, 18 W. R. 946). The case went afterwards on appeal before *Lord Hatherley, C.*, who affirmed the decision, but upon other grounds (L. R. 6 Ch. 239). See also *Upmann* v. *Elkan* (L. R. 12 Ch. 145).

§ 2.—*The Practice.*

When a patentee's rights had been infringed, it was formerly matter for consideration whether he should proceed at law, or in equity, or in the courts both of law and equity at the same time. If his object was only damages for past infringements, his course was to bring an action at Common Law; but if he required an injunction to restrain future infringements, or an inspection, or an account of profits, he was compelled to proceed in a Court of Equity. Recent legislation, and especially the Judicature Acts of 1873 and 1875, have, however, abolished the distinction between the Courts of Law and Equity, and a patentee may now obtain an injunction, an inspection, and an account, or damages, in any division of the High Court of Justice.

Every question of law and fact, or mixed law and fact, arising in any action is now determined wholly in that division of the High Court of Justice in which the action is brought, subject to certain powers of transfer of the action from one division to another, and subject also to the further qualification that trials by jury cannot be had before a judge of the Chancery Division (*Warner* v. *Murdoch*, L. R. 4 Ch. D.

750), and that by the twenty-eighth section of the Act of 1883 the trial will be without a jury unless the judge otherwise directs. It may be presumed that henceforth trials of patent cases will very seldom take place before juries.

The thirteenth section of the Patent Act of 1883 directs that no proceeding shall be taken in respect of an infringement committed before the publication of the complete specification. And the fifteenth section provides that an applicant shall not be entitled to institute any proceedings for infringement until a patent has been granted to him. Hence a patentee may sue for infringements committed after the publication of his specification, but not for those committed previously.

Although by the 113th section of the Patent Act of 1883 all the Acts or parts of Acts relating to patents and set forth in the third schedule are repealed; yet the past operation of those Acts is not to be affected, nor is the repeal to interfere with the institution or prosecution of any action or proceeding, civil or criminal, in respect thereof. Any such proceeding may be carried on as if the Act had not been passed, and any protection or benefit in relation to any such action or proceeding is not taken away or abridged.

'A plaintiff is not bound before commencing proceedings to apply to the defendant and ascertain whether he will without suit do what is required (*Upmann* v. *Elkan*, L. R. 12 Eq. 146). Nor is a plaintiff compelled to rely on the promise of the offending party not to infringe again, but is entitled to the protection of an injunction (*Geary* v. *Norton*, 1 De G. and Sm. 9).'[1]

It has always been the practice of the Court of

[1] W. N. Lawson: Patents Designs and Trademarks Practice, p. 49. In this work will be found carefully collected and arranged all the cases bearing on legal proceedings in patent actions.

Chancery, when the plaintiff can make out a proper case, to grant an interlocutory injunction, that is, an injunction before the trial of the action, without requiring the patent to be established. 'The principle on which the Court acts,' said *Lord Eldon*, in *Hill* v. *Thompson* (3 Mer. 622), 'in cases of this description is the following:—Where a patent has been granted, and an exclusive possession of some duration under it, the Court will interpose its injunction, without putting the party previously to establish the validity of his patent by an action at law. But where the patent is but of yesterday, and, upon an application being made for an injunction, it is endeavoured to be shown in opposition to it that there is no good specification, or otherwise that the patent ought not to have been granted, the Court will not, from its own notions respecting the matter in dispute, act upon the presumed validity or invalidity of the patent, without the right having been ascertained by a previous trial, but will send the patentee to law, and oblige him to establish the validity of his patent in a court of law, before it will grant him the benefit of an injunction.' And, again, in *Dudgeon* v. *Thomson* (30 L. T. N. S. 244), *Sir George Jessel, M. R.*, said, 'The Court can grant an injunction before the hearing when the patent is an old one, and the patentee has been in long and undisturbed enjoyment of it, or when its validity has been established elsewhere, and the Court sees no reason to doubt the propriety of the result, or when the conduct of the defendant is such as to enable the Court to say that as against the defendant himself there is no reason to doubt the validity of the patent.' (See also *Renard* v. *Levinstein*, 10 L. T. N. S. 94, affirmed on appeal, *ibid.* p. 177; *Betts* v. *Menzies*, 3 Jur. N. S. 357; *Clark* v. *Ferguson*, 5 Jur. N. S. 1155; *Brereton* v. *Richardson*, 1 R. P. C. 174).

When it can be shown that the patentee has had undisturbed possession for many years the Court will grant an interlocutory injunction without requiring the patent to be established, notwithstanding doubts may exist as to the validity of the patent (*Losh* v. *Hague*, 1 W. P. C. 201; *Muntz* v. *Foster*, 2 W. P. C. 93, 95; *Betts* v. *Menzies*, 3 Jur. N. S. 357). But in order to establish a right to an interlocutory injunction on this ground, the patentee must show actual public user of the invention (*Plimpton* v. *Malcolmson*, L. R. 20 Eq. 37), unfettered by the necessity of obtaining the licence of any prior patentee (*Heugh* v. *Magill*, W. N. 1877, 62). Where the patent has been the subject of several suits, all of which have terminated in favour of the patentee, an interlocutory injunction will be granted, notwithstanding a fresh fact is brought forward tending to impeach the novelty of the invention (*Newall* v. *Wilson*, 2 De G. M. & G. 282; *Davenport* v. *Jepson*, 4 De G. F. & J. 440), or the defendant offers to keep an account (*Renard* v. *Levinstein*, 2 H. & M. 628). And the fact that the validity of the patent has been established in Scotland is sufficient *primâ facie* evidence of the validity of the patent to warrant the granting an interlocutory injunction in England (*Dudgeon* v. *Thomson*, 30 L. T. N. S. 244).

If the plaintiff has shown negligence in prosecuting his rights, even though his patent has been established against another defendant (*Bridson* v. *Benecke*, 12 Bea. 1; *Bovill* v. *Crate*, L. R. 1 Eq. 388), or if the fact of infringement is matter of doubt, an injunction will be refused until after a trial; and even then, if there is ground for supposing that a new trial will be obtained (*Collard* v. *Allison*, 4 My. & Cr. 487; *Electric Telegraph Co.* v. *Nott*,[1] 2 Coop. C. C. 41, and the other

[1] In this case *Cottenham C.*, said that the Court will not grant an injunction where the legal right is disputed, unless it is satisfied

cases collected by the reporter). In almost all cases, however, the Court thinks it right, when it postpones the consideration of the injunction, to order the defendant to keep an account until the plaintiff has had an opportunity of testing the validity of his patent. But if the interlocutory injunction be granted, the Court always requires from the plaintiff an undertaking to abide by any order the Court may make as to damages in case it should ultimately be of opinion that the defendant has sustained any by the injunction which the plaintiff ought to pay (*Wakefield* v. *Duke of Buccleuch*, 11 Jur. N. S. 523).

For further statements of the general principles on which the Court acts in granting or withholding interlocutory injunctions see *Bacon* v. *Jones* (4 My. & Cr. 434); *Bridson* v. *M'Alpine* (8 Bea. 229); *Davenport* v. *Jepson* (4 De G. F. & J. 440); *Plimpton* v. *Spiller* (L. R. 4 Ch. D. 286).

The Court, however, being now empowered to try the validity of the patent, and having the control of the proceedings, and being, consequently, able to prevent any undue delay, is less disposed than formerly to grant an interlocutory injunction, but will generally content itself with giving directions to insure an immediate trial of the questions at issue between the parties, and order the motion for the injunction to stand to the hearing of the cause, adding, when necessary, a direction for the defendant to keep an account. The action may then proceed to trial in the ordinary way. (See the remarks of *Sir George Jessel, M. R.*, in *Plimpton* v. *Malcolmson*, L. R. 20 Eq. 37.)

that the legal right will eventually be established; nor where the legal right is disputed, unless satisfied that the acts complained of are a violation of it. Where, however, the sole question is the validity of the patent, and there has been exclusive enjoyment under it for a reasonable time, the Court will interpose, by injunction, until the invalidity has been established; but the injunction will be refused if there is conflicting evidence as to the infringement.

But where there has been unnecessary delay in filing the bill an account of profits before the filing of the bill will not be ordered (*Harrison* v. *Taylor*, 11 Jur. N. S. 408; *Beard* v. *Turner*, 13 L. T. N. S. 746; *Ford* v. *Foster*, L. R. 7 Ch. 616; *Crossley* v. *Derby Gas Light Company*, 1 Web. P. C. 120).

It is open to either party to move that issues may be settled, raising the various questions of fact in the cause. In a patent case the issues usually are, whether the invention be new, whether it be useful, whether it was a new manufacture, whether the patentee was the first and true inventor, whether the specification be sufficient, and whether the defendant has infringed; but, of course, these may be varied as circumstances require.[1] Since the Judicature Acts, however, the practice appears to be not to apply for issues, but to let the action come on for trial generally, upon the pleadings and objections and particulars of breaches.

It is not a matter of course for the Court to grant issues, and they are sometimes refused (*Davenport* v. *Goldberg*, 2 H. & M. 282; *Davenport* v. *Phillips*, 5 N. R. 485; *Bovill* v. *Goodier*, Law Rep. 1 Eq. 36). The Court will at any time during the progress of a suit allow the defendant to raise a fresh issue on the discovery of facts which could not with due diligence have been previously discovered (*Holste* v. *Robertson*, L. R. 4 Ch. D. 9).

By the Patent Act of 1883, sect. 29, the plaintiff in an action for infringement of a patent must deliver with his statement of claim, or by order of the Court or the judge at any subsequent time, particulars of the

[1] For a collection of the numerous cases decided as to the proper pleas to raise the issues in an action for infringement Mr. W. N. Lawson's cited work (p. 68) may be consulted.

breaches complained of. The particulars may be from time to time amended by leave of the Court or a judge.

If the particulars delivered are insufficient, further and better particulars may be required. In *Needham* v. *Oxley* (1 H. & M. 248) it was held by *Wood, V. C.*, that particulars of breaches are sufficient if, *taken together with the pleadings*, they give the defendant full and fair notice of the case made against him. See, however, the subsequent case of *Curtis* v. *Platt* (8 L. T. 657), before the same learned judge.

A plaintiff may be ordered to point out by reference to the pages and lines the parts of his specification which he alleges to be infringed (*Lamb* v. *The Nottingham Manufacturers' Company*, Seton on Decrees, 4th ed. p. 349). But this will not be required when the things alleged to be an infringement have been made an exhibit in the action (*Batley* v. *Kynock*, No. 2, L. R. 19 Eq. 229).

Where particulars of breaches alleged divers sales and specified sales to two persons, evidence of a sale to a third person was allowed where the defendant admitted having had transactions with him (*Sykes* v. *Howarth*, L. R. 12 Ch. D. 827).

The twenty-ninth section of the Patent Act of 1883, sub-sections 2 and 3, requires the defendant to deliver with his statement of defence, or by order of the Court or a judge at any subsequent time, particulars of any objections on which he relies in support thereof; and if the defendant disputes the validity of the patent, the particulars delivered by him must state on what grounds he disputes it; and if one of these grounds is want of novelty, he must state the time and place of the previous publication or user alleged by him. And sub-section 5 enables the defendant to amend such

particulars from time to time by leave of the Court or judge.[1]

A defendant who has furnished particulars literally in compliance with the statute may be called upon to answer interrogatories as to the names and addresses of alleged prior users, and whether the machines are in existence (*Birch* v. *Mather*, L. R. 22 Ch. D. 629). A defendant was ordered to give the pages and lines of the specifications to which he referred as anticipating the plaintiff's invention, and to state which of the claims in the plaintiff's specification had been anticipated by the prior specifications (*London Hosiery Company* v. *Higham*, reported in the 'Evening Standard,' July 7, 1883).

The defendant, under an order requiring him to furnish further and better particulars of his objections, gave the names and addresses of three persons as prior users of the invention, and stated that it had also been used by 'other persons in London and Birmingham.' The words between inverted commas were ordered to be struck out, as not giving sufficiently specific information (*Flower* v. *Lloyd*, S. J. 1876, p. 860).

[1] Upon the corresponding section (41) of the Patent Act of 1852 the following cases have been reported:—*Penn* v. *Bibby* (L. R. 1 Eq. 548); *Grover & Baker Company* v. *Wilson* (W. N. 1870, p. 78); *Flower* v. *Lloyd* (L. R. 6 Ch. D. 297); *Crossley* v. *Tomey* (L. R. 2 Ch. D. 533); *Plimpton* v. *Spiller* (20 S. J. 859); *Morgan* v. *Fuller*, No. 2 (L. R. 2 Eq. 297).

It has been held that the objections cannot go beyond the pleas; they are merely to state more particularly what the pleas state generally (*Macnamara* v. *Hulse*, 2 W. P. C. 128). As to other points bearing upon this subject see *Palmer* v. *Wagstaff* (8 Exch. Rep. 840); *Palmer* v. *Cooper* (9 Exch. Rep. 231); *Hull* v. *Bollard* (1 H. & N. 134); *Lister* v. *Leather* (3 Jur. N. S. 816); *Greaves* v. *Eastern Counties Railway Company* (1 Ell. & Ell. 961; *S. C.* 5 Jur. N. S. 733); *Talbot* v. *Laroche* (15 C. B. 310); *Electric Telegraph Company* v. *Nott* (4 C. B. 462); *Fisher* v. *Dewick* (1 W. P. C. 551 *n.*); *Heath* v. *Unwin* (1 W. P. C. 551); *Jones* v. *Berger* (1 W. P. C. 544 *n.*); *Household Company* v. *Neilson* (1 W. P. C. 552); *Holland* v. *Fox* (1 C. L. R. 440).

The following cases were decided under the old law with reference to the amendment by the defendant of his particulars of objection (*Penn* v. *Bibby*, L. R. 1 Eq. 548; *Wilson* v. *Gann*, 23 W. R. 546; *Renard* v. *Levinstein*, 13 W. R. 229; 11 L. T. N. S. 505; *Daw* v. *Eley*, L. R. 1 Eq. 38; *Edison Telephone Co.* v. *India-rubber Co.* 17 Ch. D. 137).

Under an objection that the invention is not new the defendant may show the want of novelty of one of two inventions described in the specification (*Sugg* v. *Silber*, L. R. 2 Q. B. D. 493).

When a plaintiff commences several actions at one time against separate infringers, the Court will, on the application of the several defendants, order the validity of the patent and other questions common to all the cases to be tried in one of the actions, and will in the meantime stay proceedings in the other actions; but this order will not be made until the defendants have given full discovery of the machines used by them and alleged to be infringements (*Foxwell* v. *Webster*, 2 Dr. & Sm. 250; *S. C.* on appeal, 10 Jur. N. S. 137).[1]

But the plaintiff is not bound by the result of the trial if it goes against him, and he may proceed against any of the other infringers.

In regard to the evidence it may be useful to remember that the Court looks with distrust on experiments conducted for the express purpose of manufacturing evidence for the cause. (*Young* v. *Fernie*, 5 Giff. 577; *Betts* v. *Neilson*, L. R. 3 Ch. 429, 433.)

It is a rule of the Court not to interfere until the

[1] It was said by *Wood, V. C.*, in the case of *Borill* v. *Crate* (L. R. 1 Eq. 388), that when the infringers are very numerous, the proper course for a plaintiff to pursue before filing separate bills against the infringers is to select one as a defendant, and write to the others, and ask if they object to be bound by the proceedings against that one and have the case tried once for all.

patentee's rights have been actually violated. But where a defendant alleges an intention and claims the right to infringe, the Court will grant an injunction, although no actual infringement may have taken place (*Frearson* v. *Loe*, L. R. 9 Ch. D. 48; *Adair* v. *Young*, L. R. 12 Ch. D. 13). The case of *Crossley* v. *Beverley* (1 W. P. C. 119) shows how far the Court will go in aiding a patentee to repress infringements. It appeared that the defendants had been secretly manufacturing gas-meters, which were copies of those protected by the plaintiff's patent, their object being to pour them into the market as soon as the patent expired. A few days before the expiration of the patent, the plaintiff, having discovered what had been done, filed his bill, and obtained an injunction to restrain the using of the articles so made even after the patent expired.

In an action for infringement of a patent, the Court or a judge may, under the thirtieth section of the Patent Act of 1883, and on the application of either party, make such order for an injunction, inspection, or account, and impose such terms and give such directions respecting the same and the proceedings thereon as the Court or a judge may see fit.

The following cases were decided under the old law with reference to an inspection of the processes used or the articles made by the defendant in alleged violation of the rights of the plaintiff:—*Bovill* v. *Moore* (2 Coop. C. C. 56); *Brown* v. *Moore* (3 Bligh. 180); *Morgan* v. *Seward* (1 W. P. C. 169). In the case of *The Patent Type Founding Company* v. *Walter* (Johns. 727), the defendant, a printer, who used types alleged to be made in colourable imitation of the type patented by the plaintiffs, was on motion ordered by *Wood, V. C.*, to deliver a sample of type to the plaintiffs for analysis, although a similar application had been refused by the Court of Exchequer in *The Patent Type*

Founding Company v. *Lloyd*, 5 H. & N. 192. However, by Order L., Rule 3 of the Supreme Court Rules 1883, the Court or a Judge is empowered in any cause or matter to authorise any samples to be taken, or any observation to be made, or experiment to be tried, which may seem necessary or expedient for the purpose of obtaining full information or evidence.

But where, in a suit for an injunction to restrain the infringement of a patent for a sewing machine, an application was made for an inspection of *all* the machines of every kind on the defendant's premises, the Court declined to make the order in the terms asked for, but (following what was stated to be the practice at common law) directed the defendant to verify on affidavit the several kinds of sewing machines which he had sold or exposed for sale since the date of the plaintiff's last disclaimer, and to produce at his solicitor's office one of each class for inspection by the plaintiff's solicitor and two of their scientific witnesses (*The Singer Manufacturing Company* v. *Wilson*, 13 W. R. 560; *S. C.* 5 N. R. 505). And inspection will not be granted unless the Court is satisfied that there is really a case to be tried at the trial, and that inspection is essential to enable the plaintiff to prove his case (*Piggott* v. *Anglo-American Telegraph Company*, 91 L. T. N. S. 46; *Batley* v. *Kynock*, L. R. 19 Eq. 90).

In a suit for an injunction a defendant denying infringement may be compelled to answer whether he used the plaintiff's materials, whether he makes any addition to them, and whether such addition makes any difference (*Renard* v. *Levinstein*, 10 L. T. N. S. 94). As to the limits of such discovery see *Crossley* v. *Tomey*, 2 C. L. D. 53; *Crossley* v. *Stewart*, 1 N. R. 426; *Rolls* v. *Isaacs*, W. N. 1878, 36. As to the discovery which a defendant in such a suit may obtain from the plain-

tiff as to his patent, see *Renard* v. *Levinstein* (11 L. T. N. S. 79); *Hoffman* v. *Postill* (L. R. 4 Ch. 673).

By the fifty-seventh section of the Judicature Act of 1873, the judge before whom a case requiring 'scientific investigation' comes for trial is empowered to send the issues of fact to be tried by an official referee. Where a patent case had been so sent for trial before an official referee, it was contended by the plaintiff in the Court of Appeal that the case was not one that required 'scientific investigation' within the meaning of the Judicature Act, but it was held to be impossible for that Court to say that an action for the infringement of a patent did not require scientific investigation; and that as the judge had decided that it did, the Court would not interfere with his discretion (*Saxby* v. *Gloucester Waggon Company*, W. N. 1880, p. 28).

The official referee will make a report as to the issues of fact which were sent to him for trial, and his findings so reported are to be considered equivalent to the finding of a jury.

On the trial of an action for the infringement of a patent the Court has power, under sect. 56 of the Judicature Act of 1873, to order without the consent of the parties that a competent person should make experiments, and report the result of his inquiry for the information and guidance of the Court (*Badische Anilin und Soda Fabrik* v. *Levinstein*, L. R. 24 Ch. Div. 156).

By the twenty-eighth section of the Patent Act of 1883 it is enacted that, in an action or proceeding for infringement or revocation of a patent, the Court may if it thinks fit, and shall on the request of either of the parties to the proceeding, call in the aid of an assessor specially qualified, and try and hear the case wholly or partially with his assistance. The action

shall be tried without a jury unless the Court shall otherwise direct.

Under the third sub-section of the same section the remuneration, if any, to be paid to such assessor shall be determined by the Court and be paid in the same manner as the other expenses of the execution of the Act; and under the fourth sub-section no evidence is to be admitted at the hearing, except by leave of the Court or a judge, in proof of any alleged infringement or objection of which particulars have not been delivered.

See also Order XXXVI. Rule 5 and Rule 7 (*a*) of the Supreme Court Rules 1883, as to the trial of causes and issues.

The defendant in an action for the infringement of a patent for a chemical process set up by his defence that he had a secret process which was not an infringement. The judge, seeing that irreparable mischief would be done to him if he were called upon to state in open Court what that secret process was, in case it should turn out that the patent was bad, allowed him not to answer certain questions which were put to him, but left him to determine for himself whether he would or not communicate his secret process to the Court, so that the Court might be able to determine whether he infringed the patent or not. The defendant, acting on the advice of his counsel, elected before the termination of the case to disclose his secret to the judge, who heard his description of it with closed doors, no persons being present except the parties and their scientific assistants (*Badische Anilin und Soda Fabrik* v. *Levinstein*, 24 Ch. D. 156).

It is now settled that the plaintiff in a patent action cannot have both damages and an account of profits, but must elect between the two which he will adopt (*Neilson* v. *Betts*, L. R. 5 H. L. 1).

In estimating the amount of damages sustained by a plaintiff in respect of an infringement of his patent, the Court adopts a form of inquiry different from that which it employs in the analogous case of an imitation of a plaintiff's trade-mark. In the latter instance the Court will not assume in the absence of evidence that the plaintiff would have sold all the articles which the defendant has wrongfully sold (*The Leather Cloth Company* v. *Hirschfeld*, 1 L. R. Eq. 299). But every sale without licence of a patented article must be a damage to a patentee, and therefore the inquiry in a patent case will extend to the sale by the defendant of *any* articles made by him since the infringement was commenced (*Davenport* v. *Rylands*, 1 L. R. Eq. 308). The inquiry will extend to the sales by the defendant within six years before the commencement of the proceedings (*Davenport* v. *Rylands*, L. R. 1 Eq. 302; *Crossley* v. *Derby Gas Light Company*, 1 W. P. C. 119); but if the plaintiff be an assignee of the patent the amount will only be taken from the date of the registration of the assignment to him (*Elwood* v. *Christy*, 5 N. R. 312). And in stating such an account the defendant must file an affidavit, stating the number of the patented articles made by him since the date of the patent, and the names and addresses of the purchasers to whom the same have been sold (*Murray* v. *Clayton*, L. R. 15 Eq. 115), and the account may be taken notwithstanding the pendency of an appeal (*Saxby* v. *Easterbrook*, L. R. 7 Ex. 207).

Where separate proceedings have been taken against the manufacturer and user of the patented article the plaintiff may have an account of profits against the manufacturer, and also damages against the user (*Penn* v. *Bibby*, L. R. 3 Eq. 308), and he cannot be compelled to accept the same royalty from a litigant as

he receives from others (*ibid.*); but a patentee being himself a manufacturer of the patented article, and having been in the habit of licensing the use of his invention on payment of a fixed royalty, is not entitled to claim as against an infringer a manufacturing profit in addition to his ordinary royalty (*Penn* v. *Jack*, L. R. 5 Eq. 81); and where such a patentee had in some instances received from users (not being the manufacturers of the patented article) his ordinary royalty, it was held that in every such case no further royalty was payable by the manufacturer (*ibid.*).

When an amendment by way of disclaimer, correction, or explanation has been allowed under the Patent Act of 1883 (see sect. 20), no damages are obtainable in any action in respect of the use of the invention before the amendment unless the patentee establishes to the satisfaction of the Court that his original claim was framed in good faith and with reasonable skill and knowledge.

The seventeenth section of the Patent Act of 1883 directs (sub-sect. 4 *b*) that if any proceeding shall be taken in respect of an infringement of a patent committed after a failure to make any prescribed payment within the prescribed time and before the enlargement of the time, the Court before which the proceeding is proposed to be taken may, if it shall think fit, refuse to award or give any damages in respect of such infringement.

The plaintiff is entitled to a perpetual injunction when the validity of the patent has been conclusively established, and the fact of infringement has been proved. And if the defendant chooses to submit the injunction may be obtained without proceeding to trial.

Where a plaintiff in an action for infringement has obtained judgment at the trial the injunction will not

be suspended pending an appeal (*Flower* v. *Lloyd*, 36 L. T. N. S. 444).

The Court has power to order the destruction of machines made in violation of a patent (*Betts* v. *De Vitre*, 34 L. J. N. S. 289, 291; *Tangye* v. *Stott*, 14 W. R. 386). However, where the patent was for a combination, and the defendant might still use for other purposes the several parts of the machine, *Wood*, *V. C.*, refused to order the machines to be destroyed, but directed them to be marked so as to prevent their being used at any future time in such a way as to continue the infringement (*Needham* v. *Oxley*, 8 L. T. N. S. 604); and in *Plimpton* v. *Malcolmson* (*Seton* on Decrees, 4th ed. p. 354) the order was that the defendant should upon oath deliver up to the plaintiff, or break up or otherwise render unfit for use, the articles complained of. See also *Frearson* v. *Loe* (L. R. 9 Ch. D. 48, 67).

It has been stated already that a patentee after disclaiming will not be allowed to enforce an injunction obtained before disclaiming, but must proceed *de novo* (*Dudgeon* v. *Thomson* L. R. 3, App. Cas. 34).

The question of infringement is one of mixed law and fact. 'There may well be a case' (said *Lord Campbell*, in *De la Rue* v. *Dickinson*, 7 E. & B. 738) 'where the judge may and ought to take upon himself to say that the plaintiff has offered no evidence to be left to the jury to prove infringement, as if there be a patent for a chemical composition, and the evidence was that the defendant had constructed and used a machine for combing wool. But if the evidence has a tendency to show that the defendant has used substantially the same means to obtain the same result as specified by the plaintiff, and scientific witnesses have sworn that the defendant actually has used such means, the question becomes one of fact, or of fact mixed with law,

which the judge is bound to submit to the jury.' The construction of the specification is for the Court alone after the meaning of technical terms has been ascertained by the jury. But in deciding the question of infringement there is (said *Lord Wensleydale*, in *Seed* v. *Higgins*, 8 H. L. Cas. 550) 'a question of fact wholly for the jury—viz. what the defendants have done; and if scientific evidence is necessary fully to elucidate the case on either side, it is no doubt admissible; and in determining the question of infringement the judge must apply what the jury find to be true.'

In *Rollins* v. *Hinks* (L. R. 13 Eq. 355) and *Axmann* v. *Lund* (L. R. 18 Eq. 330) it was held that a patentee would not be permitted to publish statements of his intention to commence legal proceedings with a view of deterring persons from purchasing articles made in alleged infringement of his patent when he had no *bonâ fide* purpose of the kind.

The judges sitting *in banc* refused an injunction to restrain a patentee from sending out circulars containing a verbatim report copied from a newspaper of the trial of an action for the infringement of his patent, the trial having terminated in his favour, and the applicants for the injunction being the defendants in the action (*Hayward* v. *Hamilton*, 'Engineer,' vol. 48, p. 428, Exch. Div. Dec. 1879).

By the thirty-second section of the Patent Act of 1883 it was enacted that if any person claiming to be the patentee of an invention, by circulars, advertisements, or otherwise, threatens any other person with any legal proceedings or liability in respect of any alleged manufacture, use, sale, or purchase of the invention, any person or persons aggrieved thereby may bring an action against him, and may obtain an injunction against the continuance of such threats, and may recover such damage (if any) as may have been sustained

thereby, if the alleged manufacture, use, sale, or purchase to which the threats related was not in fact an infringement of any legal rights of the person making such threats. But this section is not to apply if the person making such threats with due diligence commences and prosecutes an action for infringement of his patent.

Previously to the passing of this Act it had been held that it was necessary to show a want of good faith as well as the untruth of his assertions to render a patentee liable for threatening proceedings (*Halsey* v. *Brotherhood*, L. R. 15 Ch. D. 514; *Burnett* v. *Tate*, Q. B. April 27, 1883; *La Société Anonyme des Manufactures de Glaces* v. *Tilghman's Patent Sand Blast Co.*, 25 Ch. D. 1); but now the patentee's *bona fides* is by the operation of the Act no longer a good defence. Since the Act the following cases have been decided upon the construction of this section:—*Barnett and Foster* v. *Barrett's Screw Stopper Bottling Company, Limited* (1 R. P. C. 9); *Sugg and Sugg and Company Limited* v. *George Bray and Co.* (1 R. P. C. 45); *Jackson* v. *Wulstenhulmes, Rye and Co. Limited* (1 R. P. C. 106).

SCOTLAND.

The 107th section of the Patent Act of 1883 directs that in any action for infringement of a patent in Scotland the provisions of the Act, with respect to calling in the aid of an assessor, shall apply, and the action shall be tried without a jury, unless the Court shall otherwise direct; but otherwise nothing shall affect the jurisdiction and forms of process of the courts in Scotland in such an action, or in any action or proceeding respecting a patent hitherto competent to those courts. For the purposes of this section 'Court of Appeal' is to mean any court to which such action is appealed.

And by the 111th section the provisions of the Act conferring a special jurisdiction on the Court as defined by the Act shall not, except so far as the jurisdiction extends, affect the jurisdiction of any court in Scotland in any proceedings relating to patents; and with reference to any such proceedings in Scotland the term 'the Court' shall mean any Lord Ordinary of the Court of Session, and the term 'Court of Appeal' shall mean either division of the said Court.

The Court of Appeal has held in the case of *Speckhart* v. *Campbell* reported in the 'Times,' March 13, 1884, that where infringements have been committed both in England and Scotland by a defendant domiciled in Scotland, the Court, in deciding in which country proceedings should be taken, will be guided by the particular circumstances of the case and the convenience of the parties.

IRELAND.

By section 110 of the new Act all parties shall, notwithstanding anything in the Act, have in Ireland their remedies under or in respect of a patent as if the same had been granted to extend to Ireland only. And by the 111th section the jurisdiction of any court in Ireland in proceedings relating to patents is not to be affected by the provisions of the Act conferring a special jurisdiction on the Court as defined by the Act, except so far as the latter jurisdiction extends; and with reference to any such proceedings in Ireland, the terms 'the Court' and 'the Court of Appeal' respectively are to mean the High Court of Justice in Ireland and Her Majesty's Court of Appeal in Ireland.

ISLE OF MAN.

By the 112th section of the new Act it is enacted

that it shall extend to the Isle of Man, but that nothing therein shall affect the jurisdiction of the courts in the Isle of Man in proceedings for infringement, or in any action or proceeding respecting a patent competent to those courts.

COSTS.[1]

The successful plaintiff is entitled to his costs, unless his conduct has been such as to induce the judge to deprive him of them (*Nunn* v. *Albuquerque*, 31 Bea. 595).

The plaintiff will not be deprived of costs because he did not apply to the defendant before taking proceedings (*Burgess* v. *Hateley*, 26 Bea. 249; *Upmann* v. *Forrester*, 24 Ch. D. 231), nor because the defendant was unacquainted with the plaintiff's rights, nor because he had no intention to do wrong (*Burgess* v. *Hills*, 26 Bea. 244; *Cooper* v. *Whittingham*, 24 Ch. D. 231).

It is directed by the sixth sub-section of the twenty-ninth section of the Patent Act of 1883, that on the taxation of costs, regard shall be had to the particulars delivered by the plaintiff and by the defendant, and they respectively shall not be allowed any costs in respect of any particulars delivered by them unless the same is certified by the Court or a judge to have been proven, or to have been reasonable and proper, without regard to the general costs of the case.

By the thirty-first section of the Patent Act of 1883 it is enacted that, in an action for infringement of a patent, the Court or a judge may certify that the validity of the patent came in question; and if the Court or a judge so certifies, then in any subsequent action for infringement, the plaintiff in that action, on obtaining a final order or judgment in his favour, shall have his full costs, charges, and expenses as between solicitor and

[1] See the cases as to costs collected in Mr. W. N. Lawson's cited work, pp. 81–87.

client, unless the Court or judge trying the action certifies that he ought not to have the same.

Under the corresponding section in the Patent Act of 1852 this certificate was given in suits in the Court of Chancery as well as in actions at common law (*Needham* v. *Oxley*, 8 L. T. N. S. 604; *Davenport* v. *Rylands*, 1 Law Rep. Eq. 308). In the latter case, *Wood, V. C.*, decided that a patentee who has obtained this certificate may have his full costs in any subsequent action for infringement, although the validity of the patent may not have been in question in such action. In *Penn* v. *Bibby* (L. R. 3 Eq. 309) it was held that the section does not apply to the costs of the first trial.

As to what is a sufficient certificate to enable the Court to direct the costs to be taxed as above mentioned see *Betts* v. *De Vitre* (11 Jur. N. S. 11), *Bovill* v. *Hadley* (17 C. B. N. S. 435).

Other cases relating to the certificate are *Stocker* v. *Rodgers* (1 C. & R. 99); *Ball* v. *Lelm* ('Times,' April 14, 1881).

When directors of a limited company are active parties in an infringement of a patent by the company, they may be made parties to a suit against the company, and may be ordered personally to pay the costs of suit (*Betts* v. *De Vitre*, 11 Jur. N. S. 9, affirmed on appeal, L. R. 3 Ch. 429).

See further as to the taxation of costs in patent suits, *Smith* v. *Buller* (L. R. 19 Eq. 473); *Batley* v. *Kynock* (L. R. 20 Eq. 632); *Wegmann* v. *Corcoran* (27 W. N. 357).

CHAPTER XV.

REVOCATIONS.

THE old action of *scire facias*, which was one brought in the name of the Crown for the purpose of repealing a grant of letters patent, has been abolished, so far as patents for inventions are concerned, by the twenty-sixth section of the Patent Act of 1883. By that section it is enacted that the revocation of a patent may be obtained on petition to the Court, and that every ground on which a patent might, at the commencement of the Act, be repealed by *scire facias* shall be available by way of defence to an action of infringement, and shall also be a ground of revocation.

A petition for the revocation of a patent may be presented by (*a*) the Attorney General in England or Ireland, or by the Lord Advocate in Scotland; (*b*) any person authorised by these law officers; (*c*) any person alleging that the patent was obtained in fraud of his rights, or of the rights of any person under or through whom he claims; (*d*) any person alleging that he, or any person under or through whom he claims, was the true inventor of any invention included in the patentee's claim; (*e*) any person alleging that he, or any person under or through whom he claims an interest in any trade, business, or manufacture, had publicly manufactured, used, or sold within this realm before the date of the patent anything claimed by the patentee as his invention. That is to say, the persons who, in addition to

the law officers and those whom they authorise, may present a petition for the revocation of a patent are persons who allege that they have been defrauded by the grant; or those who claim to be the true inventors of the patented invention; or those who set up anterior public user by themselves, or by persons through whom they claim. Before a petition can be presented on the ground of user by other persons it will be necessary to obtain the authority of a law officer.

Along with his petition the plaintiff will have to deliver particulars of his objections to the patent, and no evidence will be admitted at the trial in proof of any objection not included in such particulars, except by leave of the Court or of a judge; but the particulars delivered may be from time to time amended by leave of the Court or of a judge. (See the section on the practice in the chapter on Infringements.) The proceedings at the trial will be similar to the proceedings in actions when the validity of a patent is in dispute. The defendant is entitled to begin and give evidence in support of the patent; and if the plaintiff gives evidence impeaching the validity of the patent, the defendant is entitled to reply. By the twenty-eighth section of the Act the Court in any proceeding for the revocation of a patent may, if it thinks fit, and shall on the request of either of the parties, call in the aid of an assessor specially qualified, and try and hear the case wholly or partially with his assistance. The case shall be tried without a jury unless the Court shall otherwise direct.

Previous to the new Act, if two patents had been issued to different persons for the same invention, the first patentee could have brought an action of *sci. fa.* to repeal the second patent (*R.* v. *Neilson*, 1 W.P. C. 671). And where there had been a false suggestion, such as was involved in a want of novelty or utility in the invention, the patent could have been repealed by the same proceedings. Fraud, non-compliance with the conditions of

the letters patent, such as filing, or insufficient specification (*Rex* v. *Arkwright*, 1 W. P. C. 66), and the fact that the invention was not a patentable one (*R.* v. *Cutler*, Macr. P. C. 124), were also grounds for the action of *sci. fa.* We have seen that every ground on which a patent might have been formerly repealed by *sci. fa.* is by the twenty-sixth section of the new Act still available as a ground of revocation.

In Scotland, proceedings for the revocation of a patent are directed by the 109th section of the Act to be in the form of an action of reduction at the instance of the Lord Advocate, or at the instance of a party having interest with his concurrence, which concurrence may be given on just cause shown only. Service of all writs and summonses in that action are to be made according to the forms and practice existing at the commencement of the Act.

By the nineteenth section of the new Act, the Court or a judge may, in a proceeding for the revocation of a patent, order at any time that the patentee shall, subject to such terms as to costs or otherwise as the Court or a judge may impose, be at liberty to apply at the Patent Office for leave to amend his specification by way of disclaimer, and may direct that in the meantime the trial or hearing of the action shall be postponed.

Where a patent has been revoked on the ground of fraud, the Comptroller is authorised by the twenty-sixth section of the new Act, on the application of the true inventor made in accordance with the provisions of the Act, to grant him a patent in lieu of the revoked patent. The new patent is to have the same date as the date of the revocation, but is to expire at the end of the term for which the revoked patent was granted.

Where the Court has made an order for the revocation of a patent, an office copy thereof must be left at the Patent Office, that an entry may be made in the register. Rule 71 of Patents Rules 1883.

CHAPTER XVI.

OFFENCES AND THEIR PENALTIES.

THE only penalties imposed by the Act of 1883 are those prescribed for the offences set forth in the 105th and 106th sections. By the 105th section it is enacted that any person who represents that any article sold by him is a patented article when no patent has been granted for the same . . . shall be liable for every offence on summary conviction to a fine not exceeding *5l.* And further, that a person shall be deemed for the purposes of the enactment to represent that an article is patented . . . if he sells the article with the word 'patent,' 'patented,' or any word or words expressing or implying that a patent has been obtained for the article stamped, engraved, or impressed on or otherwise applied to the article.

It may be mentioned here that, according to the case of *Cheavin* v. *Walker* (L. R. 5 Ch. D. 862), the use of the word 'Patent,' along with a representation of the royal arms as a label on an article made according to an invention for which the patent has expired, was considered to be a representation that the patent was still subsisting, and was held to disentitle the plaintiff from obtaining an injunction to restrain the wrongful use of the label. The plea of its being a trade-mark cannot be set up. 'It is impossible (said *Sir G. Jessel, M. R.*) to allow a man who has once had the protection of a patent to obtain a further protection by using the name of his patent as a trade-mark. No man can claim a trade-mark

in a falsehood. It is a falsehood in representing the patent as still subsisting.' See also the *Linoleum Manufacturing Company* v. *Nairn* (L. R. 7 Ch. D. 834).

By the 106th section it is enacted that any person who, without the authority of her Majesty or any of the Royal Family or of any Government Department, assumes or uses in connection with any trade, business, calling, or profession, the royal arms, or arms so nearly resembling the same as to be calculated to deceive, in such a manner as to be calculated to lead other persons to believe that he is carrying on his trade, business, calling, or profession by or under such authority as aforesaid, shall be liable on summary conviction to a fine not exceeding 20*l.*

Many persons engaged in business have been accustomed to make use of the royal arms in one way or another, and if they continue to do so they should be careful not to bring themselves within the purview of this section.

In Scotland any offence under the Act declared to be punishable on summary conviction may be prosecuted in the Sheriff's Court (sect. 108). In the Isle of Man any offence under the Act which would in England be punishable on summary conviction may be prosecuted, and any fine in respect thereof recovered at the instance of the person aggrieved, in the manner in which offences punishable on summary conviction may for the time being be prosecuted (sect. 112, sub-sect. 3).

The ninety-third section of the Patent Act of 1883 enacts that if any person makes or causes to be made a false entry in any register kept under this Act, or a writing falsely purporting to be a copy of an entry in any such register, or produces or tenders or causes to be produced or tendered in evidence any such writing, knowing the entry or writing to be false, he shall be guilty of a misdemeanor.

In the Isle of Man the punishment for a misdemeanor under the Act is imprisonment for any term not exceeding two years with or without hard labour, and with or without a fine not exceeding 100*l*. at the discretion of the Court (sect. 112, sub-sect. 2).

CHAPTER XVII.

INTERNATIONAL AND COLONIAL ARRANGEMENTS.

International Arrangements.

It is enacted by the 103rd section of the Patent Act of 1883 that, if the Crown should make any arrangement with the government or governments of any foreign state or states for the mutual protection of inventions, then any person who has applied for protection for any invention in any such state shall be entitled to a patent for his invention under the Act in priority to other applicants, and such patent shall have the same date as the date of the protection obtained in such foreign state. But the application must be made in this country in the same manner as an ordinary application under the Act, and within seven months from the date of the application for protection in the foreign state. A patentee under this section will not be allowed to recover damages for infringements happening prior to the date of the actual acceptance of his complete specification in this country. By the second subsection of the same section it is enacted that the publication in the United Kingdom or the Isle of Man, during the said period of seven months, of any description of the invention, or the use therein during the said period of the invention, shall not invalidate the patent which may be granted for the invention.

Then by the fourth subsection it is directed that these provisions are only to apply to those foreign States with respect to which Her Majesty shall from time to time by Order in Council declare them to be applicable,

and so long only in the case of each State as the Order in Council shall continue in force with respect to that State.

On March 20, 1883, a Convention was signed by representatives of the governments of Belgium, Brazil, Spain, France, Guatemala, Italy, Holland, Portugal, Salvador, Servia and Switzerland, which was afterwards ratified by these governments. By the first article of this Convention it was declared that the said States formed themselves into a *Union for the Protection of Industrial Property*, which words were (according to the Protocol accompanying the Convention[1] and having the same force, validity, and duration as the Convention itself) to be understood in their broadest sense, and to be applicable not only to industrial products properly so called, but also to agricultural products (wines, corn, fruits, cattle, &c.) and to mineral products employed in commerce (mineral waters, &c). It may here be remarked that neither agricultural products nor mineral products are patentable in this country.

By the second article of the Convention, the subjects or citizens of each of the contracting States are to enjoy in all the other States of the Union the same advantages as regards patents of every kind (see the second paragraph of the Protocol) that their respective laws grant to their own subjects or citizens. They are to have the same protection and the same legal 'recourse' [*i.e.* remedies] on any infringement of their rights provided they observe the formalities and conditions imposed on subjects, or citizens by the internal legislation [*i.e.* laws] of each State. With regard to this clause the third paragraph of the Protocol explains that it is not to affect the legislation [*i.e.* laws] of the contracting states relating to legal procedure, jurisdiction, &c.

Subjects or citizens of States not forming part of

[1] The Convention and Protocol will be found reprinted in the Appendix.

the Union who are domiciled or have industrial or commercial establishments on the territory of any of the States of the Union are by article 3 of the Convention to be on the same footing as the subjects or citizens of the contracting States.

Then by Article 4, any person who has duly registered [*i.e.* made] an application for a patent in one of the contracting States shall enjoy as regards registration in the other States, and reserving the rights of these parties, a right of priority for six months, an additional month being allowed for countries beyond sea. Subsequent registration (*i.e.* a patent obtained on a subsequent application) in any of the other States of the Union before expiry of that period shall not be invalidated by any acts done in the interval, either by registration, by publication of the invention, or the working of it by a third party.

Article 5 declares that the introduction by the patentee into the country where the patent has been granted of articles manufactured in any of the States of the Union, shall not entail forfeiture of the patent as it did in several states before the date of the Convention. But this clause is followed by another which declares that the patentee shall remain bound to work his patent in those States where the law of the country obliges him to do so. It would appear, therefore, that although a patentee is entitled to introduce into a country articles made abroad, he must still work the invention in that country if the law has a regulation to that effect.

Temporary protection is to be granted under Article eleven to patentable inventions appearing at official or officially recognised international exhibitions.

In order to carry the Convention into full effect, it was directed by Article 13 that an International Office should be organised under the name of *Bureau International de l'Union pour la protection de la Propriété Industrielle*, and that this Office should be placed

under the authority of the Central Administration of the Swiss Confederation, and worked under its supervision.

It was then agreed by the next Article that the Convention should be submitted to periodical revisions, with a view to improving its provisions, for which end conferences by delegates from the contracting States will be held. It was also agreed that special arrangements for the protection of industrial property might be made separately between any of the contracting States, provided that such arrangements do not contravene the provisions of the Convention.

By Article 16 it was agreed that States which did not originally take part in the Convention should be permitted to join the Union afterwards by diplomatically notifying their intention to do so to the Government of the Swiss Confederation. And by Article 18 it is provided that any State might retire from the Union by giving notice to that effect to the Government of the Swiss Confederation. At the expiration of one year from the date of the notice the State giving it will cease to be a member of the Union.

Great Britain joined this Convention on May 1, 1884, and the Order in Council under section 103 of the Patents Act will shortly be made. The Board of Trade will immediately issue rules as to applications for patents under this Convention.

Colonial Arrangements.

When it is made to appear to Her Majesty that the legislature of any British possession has made satisfactory provision for the protection of inventions patented in this country, Her Majesty is empowered, by the 104th section of the Patents Act of 1883 by Order in Council, to apply the provisions of the 103rd section, with such variations or additions as may seem fit, to such British possession, but such order is made revocable by another Order in Council.

CHAPTER XVIII.

THE PATENT OFFICE—THE COMPTROLLER—GENERAL RULES —SEAL OF THE OFFICE—OFFICIAL DOCUMENTARY EVIDENCE—REGISTERS—PUBLICATIONS AND INDEXES—LIBRARY—PATENT MUSEUM.

UNTIL a new office has been provided by the Treasury, under the authority of the eighty-second section of the Act of 1883, the business relating to patents is transacted at the offices of the defunct Commissioners of Patents in Southampton Buildings, Chancery Lane. All the officers and clerks of the office are appointed by the Board of Trade, subject to the approval of the Treasury.

The Office is open to the public every week-day between the hours of ten and four, except on Christmas day, Good Friday, the day observed as her Majesty's birthday, and the days observed as days of public fast or thanksgiving, or as holidays at the Bank of England.

THE COMPTROLLER-GENERAL.

The Comptroller-General of Patents, Designs, and Trade-Marks, is an officer appointed by the Board of Trade under the eighty-third section of the new statute to act under the superintendence and direction of the Board as chief of the Patent Office, which is placed under his immediate charge.

Besides acting as general manager of the business of the office, and as superintendent of the examiners and clerks therein, his principal duties, as prescribed by

the legislature, so far as regards patents, are those already mentioned in the preceding chapters relating to the various steps to be taken on applications for patents, on oppositions to grants, on the issue of patents, and on applications for leave to amend specifications.

In addition to these, which may be called his routine duties, though some of them will call for the exercise of much care and thought, he is required, by section 40, to issue periodically an Illustrated Journal of Patented Inventions, as well as reports of patent cases decided by courts of law, and any other information that he may deem generally useful or important. He has to make provision for keeping on sale copies of the journal, and also of all complete specifications for the time being in force, with their accompanying drawings. And he is directed to continue in such form as he may deem expedient the indexes and abridgments of specifications hitherto published, and to prepare and publish from time to time such other indexes, abridgments of specifications, catalogues, and other works relating to inventions as he may see fit.

He is empowered to refuse patents when their use would, in his opinion, be contrary to law or morality (sect. 86).

He is enabled to correct clerical errors in or in connection with applications for patents, or in the name, style, or address of the registered proprietor of a patent (sect. 91).

By Rule 18 the Comptroller is empowered to amend documents and to obviate irregularities in procedure; by Rule 47 he is authorised to enlarge the time prescribed by the Rules for doing any act or taking any proceeding thereunder, and by Rule 77 large powers are given to him, with the sanction of the Board of Trade, to dispense with acts, documents, evidence, &c., required under the Rules.

Where any discretionary power is by the Act given to the Comptroller, it is expressly directed by the ninety-fourth section, that he shall not exercise that power adversely to the applicant for a patent, or for amendment of a specification, without (if so required within the prescribed time by the applicant) giving the applicant an opportunity of being heard personally or by his agent. As to the procedure, see Rules 11–14 of the Patents Rules, 1883.

In any case of doubt or difficulty arising in the administration of any of the provisions of the Act, the ninety-fifth section directs that he may apply to either of the law officers for directions in the matter.

The Comptroller is required by the 102nd section to cause a report respecting the execution by or under him of the Act to be laid before both Houses of Parliament, before the first day of June in every year, and to include therein for the year to which each report relates all general rules made in that year under or for the purposes of the Act, and an account of all fees, salaries, and allowances, and other money received and paid under the Act.

In case of the absence of the Comptroller any act, or thing directed to be done by or to him may be done by or to any officer authorised in that behalf by the Board of Trade (sect. 82, sub-sect. 4).

GENERAL RULES.

The Board of Trade is empowered by the 101st section of the new Act to make rules for regulating generally the business of the Patent Office and all things placed under the direction and control of the Comptroller or of the Board; and particularly for regulating the practice of registration; for making or requiring duplicates of specifications, amendments (*sic*), drawings, and other documents; for securing and regulating

the publishing and selling of copies thereof; for securing and regulating the making, printing, publishing and selling of Indexes to abridgments of specifications and other documents in the Patent Office, and providing for the inspection of indexes, abridgments, and other documents. Such general rules are to be of the same effect as if they were contained in the Act, and are to be judicially noticed. They must be laid before the two Houses of Parliament, either of which has power within a limited time to annul any of them.

The Rules which have been issued by the Board of Trade, with the short title of the Patents Rules, 1883, are reprinted in the Appendix to this volume.

THE SEAL OF THE PATENT OFFICE.

By the eighty-fourth section of the Patent Act of 1883, it is directed that there shall be a seal for the Patent Office, and that impressions thereof shall be judicially noticed and admitted in evidence.

OFFICIAL DOCUMENTARY EVIDENCE.

By the eighty-ninth section of the same Act it is enacted that printed or written copies or extracts, purporting to be certified by the Comptroller and sealed with the seal of the Patent Office, of or from patents, specifications, disclaimers, and other documents in the Patent Office, and of or from registers and other books kept there, shall be admitted in evidence in all courts and in all proceedings, without further proof or production of the originals.

Then by the ninety-sixth section a certificate purporting to be under the hand of the Comptroller as to any entry, matter, or thing which he is authorised by the Act, or any general rules made thereunder, to make or do, shall be *primâ facie* evidence of the entry having

been made, and of the contents thereof, and of the matter or thing having been done or left undone.

By the twenty-third section of the same Act, it is enacted that the Register of Patents to be kept at the Patent Office shall be *primâ facie* evidence of any matters directed or authorised to be inserted therein.

Finally, by the hundredth section of the Act it is directed that copies of all specifications, drawings, and amendments left at the Patent Office after the commencement of the Act, printed for and sealed with the seal of the Patent Office, shall be transmitted to the Edinburgh Museum of Science and Art, and to the Enrolments Office of the Chancery Division in Ireland, and to the Rolls Office in the Isle of Man, within twenty-one days after the same shall respectively have been accepted or allowed at the Patent Office; and certified copies of or extracts from any such documents shall be given to any person requiring the same on payment of the prescribed fee; and any such copy or extract shall be admitted in evidence in all courts in Scotland and Ireland and in the Isle of Man, without further proof or production of the originals.

REGISTERS.

The Register of Patents kept at the office and mentioned in the chapter on Registration is open to public inspection daily (with certain exceptions mentioned in Rule 75) between the hours of ten and four. Up to the end of 1883 the registers kept at the Patent Office were two. In the one called the Register of Patents were recorded, in chronological order and with the dates, all patents granted under the Patent Act of 1852, as well as the deposit or filing of specifications, disclaimers, memoranda of alterations, amendments, confirmations, and extensions, and the expiry, vacating, and cancelling of patents. The other register, called the Register of

Proprietors, contains entries of the assignments of patents, or of any share or interest therein; and of licences, mentioning the districts to which they relate, with the names of persons having shares or interests in patents and licences, and the dates at which such shares or interests were acquired.

PUBLICATIONS AND INDEXES.

Besides the Illustrated Journal of Patented Inventions and reports of Patent cases directed to be published by the fortieth section of the new Act, several other publications are issued by the Patent Office. Printed copies of all the specifications filed under the Patent Act of 1852, and of all specifications enrolled previously to the passing of the said Act are purchasable for small sums at the office, with lithographed outline copies of the drawings accompanying such specifications. All the complete specifications under the new Act are also printed and published when approved.

Alphabetical indexes of all the specifications of patents enrolled in Chancery, from 1617 to the latest available date, have been published under the authority of the office, as well as an index arranging the specifications according to the subject matter, and supplemental indexes continue to be published annually. Chronological indexes of patents, from the earliest date to the year 1875, have also been published. Another index, called the Reference Index of Patents, points out the office in which each enrolled or filed specification of a patent may be consulted; the books in which specifications, law proceedings, and other subjects connected with inventions have been noticed; also, such specifications as have been published under official authority. These indexes are of great service in tracing the history of inventions.

The volumes containing Abridgments of specifications arranged chronologically in classes are of immense utility to inventors who wish to discover what has been already done in any particular branch of invention.

Copies of the Commissioners' publications are presented to the principal Public Offices, Seats of Learning, Societies, Institutions, Libraries, British Colonies, and Foreign States.

PUBLIC LIBRARY.

A library has been established in connection with the Patent Office, and this is open free to the public. The whole of the publications of the office are on the shelves of the library, where may also be consulted all the leading British and Foreign Scientific Journals and text-books in the various departments of science and art.

PATENT MUSEUM.

The Patent Museum at South Kensington is transferred by the forty-first section of the new Act to the Department of Science and Art, which is empowered by the forty-second section to require any patentee to furnish them with a model of his invention on payment of the cost, the amount in case of dispute to be settled by the Board of Trade.

ADDITIONS TO RULES.

The following instructions have been issued by the Comptroller of Patents since the issue of the Patents Rules :—

CONCISE EXPLANATORY STATEMENT NOT REQUIRED.

By direction of the Board of Trade, the 'concise explanatory statement' required by Rule 31 of the Patents Rules will no longer be required to be furnished

to this Office by applicants for Patents. The drawing, as prescribed by Rule 31, must, however, be supplied.

CAVEATS AS TO PATENTS AND AMENDMENTS.

Any person who may be interested in knowing the date when the complete specification in respect of any particular application shall have been accepted by the Comptroller and advertised in the Official Journal, or the date when an application for leave to amend any particular specification shall have been filed at the Patent Office and advertised, may be informed of such dates upon his forwarding to the Comptroller a request in writing (upon foolscap paper), to that effect, together with a Patents' Form Q., bearing a 5*s*. stamp.

AS TO PATENTS OF COMMUNICATION.

Patents Rule 6 prescribes that an application for a patent shall be made upon Form A or A1.

Form A1 provides only for the declaration being made by a person resident in the United Kingdom.

An application for a Patent upon A1 from persons resident abroad will not therefore in future be received at the Patent Office.

This regulation will not, it is believed, in any way impede the introduction of inventions into the United Kingdom. Applications by persons resident abroad can, as heretofore, be made upon Form A, or through an agent residing in the United Kingdom on Form A1.

The regulation is only intended to prohibit agents living abroad from making the declaration on Form A1, and does not interfere with their acting for applicants in the preparation of their specifications, drawings, amendments, &c., &c.

PAYMENT OF SEVENTH YEAR'S DUTIES BY INSTALMENTS.

The Board of Trade, with the consent of the Treasury, have made the following reduction relating to certain fees prescribed by the Second Schedule of the Patents, Designs, and Trade Marks Act, 1883. In the case of patents granted before the commencement of the said Act, a patentee who has paid the prescribed fee of 50*l.* may in lieu of the prescribed fee of 100*l.* payable before the end of seven years from the date of patent, pay the following annual fees:—

		£	s.	d.
Before the end of the 7th year	{from date of patent}	10	0	0
„ „ 8th „	„	10	0	0
„ „ 9th „	„	10	0	0
„ „ 10th „	„	15	0	0
„ „ 11th „	„	15	0	0
„ „ 12th „	„	20	0	0
„ „ 13th „	„	20	0	0

FEES ON CORRECTIONS.

The Board of Trade, with the consent of the Treasury, have ordered that from and after the 1st of October, 1884, the fee No. 36 in the First Schedule to the Patents Rules, 1883, be amended, and shall in future be as follows:—

No. 36. On request to Comptroller to correct a clerical error,

	£	s.	d.
Up to sealing . . .	0	5	0
After „ . . .	1	0	0

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FORASMUCH as your most excellent Majesty, in your royal judgment, and of your blessed disposition to the weal and quiet of your subjects, did in the year of our Lord God 1610, publish in print to the whole realm, and to all posterity, that all grants and monopolies, and of the benefit of any penal laws, or of power to dispense with the law, or to compound for the forfeiture, are contrary to your Majesties laws, which your Majesties declaration is truly consonant and agreeable to the ancient and fundamental laws of this your realm: And whereas your Majesty was further graciously pleased expressly to command that no suitor should presume to move your Majesty for matters of that nature; yet nevertheless, upon misinformations, and untrue pretences of public good, many such grants have been unduly obtained, and unlawfully put in execution, to the great grievance and inconvenience of your Majesties subjects, contrary to the laws of this your realm, and contrary to your Majesties most royal and blessed intention so published, as aforesaid; for avoiding thereof, and preventing of the like to come, may it please your excellent Majesty, at the humble suit of the Lords Spiritual and Temporal, and the Commons in this present Parliament assembled, that it may be declared and enacted, and be it declared and enacted by authority of this present Parliament, that all

monopolies, and all commissions, grants, licences, charters, and letters patent heretofore made or granted, or hereafter to be made or granted to any person or persons, bodies politic or corporate whatsoever, of or for the sole buying, selling, making, working, or using of anything within this realm, or the dominion of Wales; or of any other monopolies, or of power, liberty, or faculty to dispense with any others, or to give licence or toleration to do, use, or exercise anything against the tenour or purport of any law or statute; or to give or make any warrant for any such dispensation, licence, or toleration to be had or made, or to agree or compound with any others for any penalty, or forfeitures limited by any statute, or of any grant or promise of the benefit, profit, or commodity, of any forfeiture, penalty, or sum of money, that is or shall be due by any statute, before judgment thereupon had, and all proclamations, inhibitions, restraints, warrants of assistance, and all other matters and things whatsoever, any way tending to the instituting, erecting, strengthening, furthering, or countenancing of the same, or any of them, are altogether contrary to the laws of this realm, and so are, and shall be utterly void and of none effect, and in no wise to be put in use or execution.

Monopolies, etc., shall be tried by the common laws of this realm.

2. And be it further declared and enacted by the authority aforesaid, that all monopolies, and all such commissions, grants, licences, charters, letters patents, proclamations, inhibitions, restraints, warrants of assistance, and all other matters and things tending, as aforesaid, and the force and validity of them, and every of them, ought to be, and shall be for ever hereafter examined, heard, tryed, and determined by and according to the common laws of this realm, and not otherwise.

All persons disabled to use monopolies, etc.

3. And be it further enacted by the authority aforesaid, that all person and persons, bodies politic and corporate whatsoever, which now are, or hereafter shall be, shall stand and be disabled, and uncapable to have, use, exercise or put in use any monopoly, or any such commission, grant, licence, charter, letters patents, proclamation, inhibition, restraint, warrant of assistance, or other matter or thing tending, as aforesaid, or any liberty, power or faculty, grounded, or pretended to be grounded, upon them or any of them.

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4. And be it further enacted by the authority aforesaid, that if any person or persons at any time after the end of forty days next, after the end of this present session of parliament, shall be hindred, grieved, disturbed, or disquieted, or his or their goods or chattels any way seized, attached, distrained, taken, carried away, or detained, by occasion or pretext of any monopoly, or of any such commission, grant, licence, power, liberty, faculty, letters patents, proclamation, inhibition, restraint, warrant of assistance, or other matter or thing tending as aforesaid, and will sue to be relieved in or for any of the premises, that in every such case the same person and persons shall and may have his and their remedy for the same at the common law, by an action or actions to be grounded upon this statute; the same action and actions to be heard and determined in the Courts of King's Bench, Common Pleas, and Exchequer, or in any of them, against him or them by whom he or they shall be so hindred, grieved, disturbed, or disquieted, or against him or them by whom his or their goods or chattels shall be so seized, attached, distrained, taken, carried away or detained, wherein all and every such person and persons which shall be so hindred, grieved, disturbed, or disquieted, or whose goods or chattels shall be so seized, attached, distrained, taken, carried away, or detained, shall recover three times so much as the damages which he or they sustained, by means or occasion of being so hindred, grieved, disturbed, or disquieted, or by means of having his or their goods or chattels seized, attached, distrained, taken, carried away, or detained, and double costs; and in such suits, or for the staying or delaying thereof, no essoin, protection, wager of law, aid, prayer, privilege, injunction, or order of restraint, shall be in any wise prayed, granted, admitted, or allowed, nor any more than one imparlance: And if any person or persons shall, after notice given that the action depending is grounded upon this statute, cause or procure any action at the common law, grounded upon this statute, to be stayed or delayed before judgment, by colour or means of any order, warrant, power, or authority, save only of the court wherein such action, as aforesaid, shall be brought and depending, or after judgment had upon such

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action, shall cause or procure the execution of or upon any such judgment to be stayed, or delayed by colour or means of any order, warrant, power, or authority, save only by writ of error or attaint, that then the said person and persons so offending shall incur and sustain the pains, penalties, and forfeitures ordained and provided by the statute of provision and præmunire, made in the sixteenth year of the reign of King Richard the Second.

St. 16 R. II. c. 5.

Letters patents to use new manufactures, saved.

5. Provided nevertheless, and be it declared and enacted, that any declaration before mentioned shall not extend to any letters patents and grants of privilege for the term of one and twenty years, or under, heretofore made of the sole working or making of any manner of new manufacture within this realm to the first and true inventor or inventors of such manufactures, which others at the time of the making of such letters patents and grants did not use, so they be not contrary to the law, nor mischievous to the state, by raising of the prices of commodities at home, or hurt of trade, or generally inconvenient, but that the same shall be of such force as they were, or should be, if this Act had not been made, and of none other: And if the same were made for more than one and twenty years, that then the same for the term of one and twenty years only, to be accompted from the date of the first letters patents and grants thereof made, shall be of such force as they were or should have been, if the same had been made but for the term of one and twenty years only, and as if this Act had never been had or made, and of none other.

6. Provided also, and be it declared and enacted, that any declaration before mentioned shall not extend to any letters patents and grants of privilege for the term of fourteen years or under, hereafter to be made, of the sole working or making of any manner of new manufactures within this realm, to the true and first inventor or inventors of such manufactures, which others at the time of making such letters patents and grants shall not use, so as also they be not contrary to the law, nor mischievous to the state, by raising prices of commodities at home, or hurt of trade, or generally inconvenient: the said fourteen years to be accompted from the date of the first letters patents or grant of such privilege hereafter to be

made, but that the same shall be of such force as they should be if this Act had never been made, and of none other.[1]

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46 & 47 VICT. c. 57.

An Act to amend and consolidate the Law relating to Patents for Inventions, Registration of Designs, and of Trade Marks. [*25th August* 1883.]

[The sections relating to the Registration of Designs and of Trade Marks are not here reprinted.]

BE it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :—

PART I.—PRELIMINARY.

itle. 1. This Act may be cited as the Patents, Designs, and Trade Marks Act, 1883.

ion of Act parts. 2. This Act is divided into parts, as follows :—

Part I.—PRELIMINARY.
Part II.—PATENTS.
Part III.—DESIGNS.
Part IV.—TRADE MARKS.
Part V.—GENERAL.

ıencement t. 3. This Act, except where it is otherwise expressed, shall commence from and immediately after the thirty-first day of December 1883.

PART II.—PATENTS.

Application for and Grant of Patent.

ıns entitled ply for t. 4. (1) Any person, whether a British subject or not, may make an application for a patent.

(2) Two or more persons may make a joint application for a patent, and a patent may be granted to them jointly.

[1] The remaining sections of the Act have become obsolete or have been repealed.

Application and specification.

5. (1) An application for a patent must be made in the form set forth in the First Schedule to this Act, or in such other form as may be from time to time prescribed; and must be left at, or sent by post to, the Patent Office in the prescribed manner.

(2) An application must contain a declaration to the effect that the applicant is in possession of an invention, whereof he, or, in the case of a joint application, one or more of the applicants, claims or claim to be the true and first inventor or inventors, and for which he or they desires or desire to obtain a patent; and must be accompanied by either a provisional or complete specification.

(3) A provisional specification must describe the nature of the invention, and be accompanied by drawings if required.

(4) A complete specification, whether left on application or subsequently, must particularly describe and ascertain the nature of the invention, and in what manner it is to be performed, and must be accompanied by drawings if required.

(5) A specification, whether provisional or complete, must commence with the title, and in the case of a complete specification must end with a distinct statement of the invention claimed.

Reference of application to examiner.

6. The Comptroller shall refer every application to an examiner, who shall ascertain and report to the Comptroller whether the nature of the invention has been fairly described, and the application, specification, and drawings (if any) have been prepared in the prescribed manner, and the title sufficiently indicates the subject-matter of the invention.

Power for Comptroller to refuse application or require amendment.

7. (1) If the examiner reports that the nature of the invention is not fairly described, or that the application, specification or drawings has not or have not been prepared in the prescribed manner, or that the title does not sufficiently indicate the subject-matter of the invention, the Comptroller may require that the application, specification, or drawings be amended before he proceeds with the application.

(2) Where the Comptroller requires an amendment, the applicant may appeal from his decision to the law officer.

(3) The law officer shall, if required, hear the applicant and the Comptroller, and may make an order determining

whether and subject to what conditions, if any, the application shall be accepted.

(4) The Comptroller shall, when an application has been accepted, give notice thereof to the applicant.

(5) If after an application has been made, but before a patent has been sealed, an application is made, accompanied by a specification bearing the same or a similar title, it shall be the duty of the examiner to report to the Comptroller whether the specification appears to him to comprise the same invention; and, if he reports in the affirmative, the Comptroller shall give notice to the applicants that he has so reported.

(6) Where the examiner reports in the affirmative, the Comptroller may determine, subject to an appeal to the law officer, whether the invention comprised in both applications is the same, and if so he may refuse to seal a patent on the application of the second applicant.

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8. (1) If the applicant does not leave a complete specification with his application, he may leave it at any subsequent time within nine months from the date of application.

(2) Unless a complete specification is left within that time the application shall be deemed to be abandoned.

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9. (1) Where a complete specification is left after a provisional specification, the Comptroller shall refer both specifications to an examiner for the purpose of ascertaining whether the complete specification has been prepared in the prescribed manner, and whether the invention particularly described in the complete specification is substantially the same as that which is described in the provisional specification.

(2) If the examiner reports that the conditions hereinbefore contained have not been complied with, the Comptroller may refuse to accept the complete specification unless and until the same shall have been amended to his satisfaction; but any such refusal shall be subject to appeal to the law officer.

(3) The law officer shall, if required, hear the applicant and the Comptroller, and may make an order determining whether and subject to what conditions, if any, the complete specification shall be accepted.

(4) Unless a complete specification is accepted within twelve months from the date of application, then (save in the case of an appeal having been lodged against the refusal to accept) the application shall, at the expiration of those twelve months, become void.

(5) Reports of examiners shall not in any case be published or open to public inspection, and shall not be liable to production or inspection in any legal proceeding, other than an appeal to the law officer under this Act, unless the court or officer having power to order discovery in such legal proceeding shall certify that such production or inspection is desirable in the interests of justice, and ought to be allowed.

Advertisement on acceptance of complete specification.

10. On the acceptance of the complete specification the Comptroller shall advertise the acceptance; and the application and specification or specifications with the drawings (if any) shall be open to public inspection.

Opposition to grant of patent.

11. (1) Any person may at any time within two months from the date of the advertisement of the acceptance of a complete specification give notice at the Patent Office of opposition to the grant of the patent on the ground of the applicant having obtained the invention from him, or from a person of whom he is the legal representative, or on the ground that the invention has been patented in this country on an application of prior date, or on the ground of an examiner having reported to the Comptroller that the specification appears to him to comprise the same invention as is comprised in a specification bearing the same or a similar title and accompanying a previous application, but on no other ground.

(2) Where such notice is given the Comptroller shall give notice of the opposition to the applicant, and shall, on the expiration of those two months, after hearing the applicant and the person so giving notice, if desirous of being heard, decide on the case, but subject to appeal to the law officer.

(3) The law officer shall, if required, hear the applicant and any person so giving notice and being, in the opinion of the law officer, entitled to be heard in opposition to the grant, and shall determine whether the grant ought or ought not to be made.

(4) The law officer may, if he thinks fit, obtain the assist-

ance of an expert, who shall be paid such remuneration as the law officer, with the consent of the Treasury, shall appoint.

g of patent. 12. (1) If there is no opposition, or, in case of opposition, if the determination is in favour of the grant of a patent, the Comptroller shall cause a patent to be sealed with the seal of the Patent Office.

(2) A patent so sealed shall have the same effect as if it were sealed with the Great Seal of the United Kingdom.

(3) A patent shall be sealed as soon as may be, and not after the expiration of fifteen months from the date of application, except in the cases hereinafter mentioned, that is to say—

(*a*) Where the sealing is delayed by an appeal to the law officer, or by opposition to the grant of the patent, the patent may be sealed at such time as the law officer may direct.

(*b*) If the person making the application dies before the expiration of the fifteen months aforesaid, the patent may be granted to his legal representative and sealed at any time within twelve months after the death of the applicant.

f patent. 13. Every patent shall be dated and sealed as of the day of the application: Provided that no proceedings shall be taken in respect of an infringement committed before the publication of the complete specification: Provided also, that in case of more than one application for a patent for the same invention, the sealing of a patent on one of those applications shall not prevent the sealing of a patent on an earlier application.

Provisional Protection.

ional pro- 14. Where an application for a patent in respect of an invention has been accepted, the invention may during the period between the date of the application and the date of sealing such patent be used and published without prejudice to the patent to be granted for the same; and such protection from the consequences of use and publication is in this Act referred to as provisional protection.

Protection by Complete Specification.

Effect of acceptance of complete specification.

15. After the acceptance of a complete specification and until the date of sealing a patent in respect thereof, or the expiration of the time for sealing, the applicant shall have the like privileges and rights as if a patent for the invention had been sealed on the date of the acceptance of the complete specification: Provided that an applicant shall not be entitled to institute any proceeding for infringement unless and until a patent for the invention has been granted to him.

Patent.

Extent of patent.

16. Every patent when sealed shall have effect throughout the extent of the United Kingdom and the Isle of Man.

Term of patent.

17. (1) The term limited in every patent for the duration thereof shall be fourteen years from its date.

(2) But every patent shall, notwithstanding anything therein or in this Act, cease if the patentee fails to make the prescribed payments within the prescribed times.

(3) If, nevertheless, in any case, by accident, mistake, or inadvertence, a patentee fails to make any prescribed payment within the prescribed time, he may apply to the Comptroller for an enlargement of the time for making that payment.

(4) Thereupon the Comptroller shall, if satisfied that the failure has arisen from any of the above-mentioned causes, on receipt of the prescribed fee for enlargement, not exceeding ten pounds, enlarge the time accordingly, subject to the following conditions:

(*a*) The time for making any payment shall not in any case be enlarged for more than three months.

(*b*) If any proceeding shall be taken in respect of an infringement of the patent committed after a failure to make any payment within the prescribed time, and before the enlargement thereof, the Court before which the proceeding is proposed to be taken may, if it shall think fit, refuse to award or give any damages in respect of such infringement.

Amendment of Specification.

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18. (1) An applicant or a patentee may, from time to time, by request in writing left at the Patent Office, seek leave to amend his specification, including drawings forming part thereof, by way of disclaimer, correction, or explanation, stating the nature of such amendment and his reasons for the same.

(2) The request and the nature of such proposed amendment shall be advertised in the prescribed manner, and at any time within one month from its first advertisement any person may give notice at the Patent Office of opposition to the amendment.

(3) Where such notice is given the Comptroller shall give notice of the opposition to the person making the request, and shall hear and decide the case subject to an appeal to the law officer.

(4) The law officer shall, if required, hear the person making the request and the person so giving notice, and being in the opinion of the law officer entitled to be heard in opposition to the request, and shall determine whether and subject to what conditions, if any, the amendment ought to be allowed.

(5) Where no notice of opposition is given, or the person so giving notice does not appear, the Comptroller shall determine whether and subject to what conditions, if any, the amendment ought to be allowed.

(6) When leave to amend is refused by the Comptroller, the person making the request may appeal from his decision to the law officer.

(7) The law officer shall, if required, hear the person making the request and the Comptroller, and may make an order determining whether, and subject to what conditions, if any, the amendment ought to be allowed.

(8) No amendment shall be allowed that would make the specification, as amended, claim an invention substantially larger than or substantially different from the invention claimed by the specification as it stood before amendment.

(9) Leave to amend shall be conclusive as to the right of the party to make the amendment allowed, except in case of fraud; and the amendment shall in all courts and for all purposes be deemed to form part of the specification.

(10) The foregoing provisions of this section do not apply when and so long as any action for infringement or other legal proceeding in relation to a patent is pending.

Power to disclaim part of invention during action, &c.

19. In an action for infringement of a patent, and in a proceeding for revocation of a patent, the Court or a judge may at any time order that the patentee shall, subject to such terms as to costs and otherwise as the Court or a judge may impose, be at liberty to apply at the Patent Office for leave to amend his specification by way of disclaimer, and may direct that in the meantime the trial or hearing of the action shall be postponed.

Restriction on recovery of damages.

20. Where an amendment by way of disclaimer, correction, or explanation, has been allowed under this Act, no damages shall be given in any action in respect of the use of the invention before the disclaimer, correction, or explanation, unless the patentee establishes to the satisfaction of the Court that his original claim was framed in good faith and with reasonable skill and knowledge.

Advertisement of amendment.

21. Every amendment of a specification shall be advertised in the prescribed manner.

Compulsory Licences.

Power for Board to order grant of licences.

22. If on the petition of any person interested it is proved to the Board of Trade that by reason of the default of a patentee to grant licences on reasonable terms—

(*a*) The patent is not being worked in the United Kingdom; or

(*b*) The reasonable requirements of the public with respect to the invention cannot be supplied; or

(*c*) Any person is prevented from working or using to the best advantage an invention of which he is possessed,

the Board may order the patentee to grant licences on such terms as to the amount of royalties, security for payment, or otherwise, as the Board, having regard to the nature of the

invention and the circumstances of the case, may deem just, and any such order may be enforced by mandamus.

Register of Patents.

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23. (1) There shall be kept at the Patent Office a book called the Register of Patents, wherein shall be entered the names and addresses of grantees of patents, notifications of assignments and of transmissions of patents, of licences under patents, and of amendments, extensions, and revocations of patents, and such other matters affecting the validity or proprietorship of patents, as may from time to time be prescribed.

(2) The register of patents shall be primâ facie evidence of any matters by this Act directed or authorised to be inserted therein.

(3) Copies of deeds, licences, and any other documents affecting the proprietorship in any letters patent or in any licence thereunder, must be supplied to the Comptroller in the prescribed manner for filing in the Patent Office.

Fees.

1 schedule.

24. (1) There shall be paid in respect of the several instruments described in the Second Schedule to this Act, the fees in that schedule mentioned, and there shall likewise be paid, in respect of other matters under this part of the Act, such fees as may be from time to time, with the sanction of the Treasury, prescribed by the Board of Trade; and such fees shall be levied and paid to the account of her Majesty's Exchequer in such manner as the Treasury may from time to time direct.

(2) The Board of Trade may from time to time, if they think fit, with the consent of the Treasury, reduce any of those fees.

Extension of Term of Patent.

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25. (1) A patentee may, after advertising in manner directed by any rules made under this section his intention to do so, present a petition to her Majesty in Council, pray-

ing that his patent may be extended for a further term; but such petition must be presented at least six months before the time limited for the expiration of the patent.

(2) Any person may enter a caveat, addressed to the Registrar of the Council at the Council Office, against the extension.

(3) If her Majesty shall be pleased to refer any such petition to the Judicial Committee of the Privy Council, the said Committee shall proceed to consider the same, and the petitioner and any person who has entered a caveat shall be entitled to be heard by himself or by counsel on the petition.

(4) The Judicial Committee shall, in considering their decision, have regard to the nature and merits of the invention in relation to the public, to the profits made by the patentee as such, and to all the circumstances of the case.

(5) If the Judicial Committee report that the patentee has been inadequately remunerated by his patent, it shall be lawful for her Majesty in Council to extend the term of the patent for a further term not exceeding seven, or in exceptional cases fourteen, years; or to order the grant of a new patent for the term therein mentioned, and containing any restrictions, conditions, and provisions that the Judicial Committee may think fit.

(6) It shall be lawful for her Majesty in Council to make, from time to time, rules of procedure and practice for regulating proceedings on such petitions, and subject thereto such proceedings shall be regulated according to the existing procedure and practice in patent matters of the Judicial Committee.

(7) The costs of all parties of and incident to such proceedings shall be in the discretion of the Judicial Committee; and the orders of the Committee respecting costs shall be enforceable as if they were orders of a division of the High Court of Justice.

Revocation.

Revocation of patent.

26. (1) The proceeding by scire facias to repeal a patent is hereby abolished.

(2) Revocation of a patent may be obtained on petition to the Court.

(3) Every ground on which a patent might at the commencement of this Act, be repealed by scire facias shall be available by way of defence to an action of infringement, and shall also be a ground of revocation.

(4) A petition for revocation of a patent may be presented by—

(*a*) The Attorney General in England or Ireland, or the Lord Advocate in Scotland:

(*b*) Any person authorised by the Attorney General in England or Ireland, or the Lord Advocate in Scotland:

(*c*) Any person alleging that the patent was obtained in fraud of his rights, or of the rights of any person under or through whom he claims:

(*d*) Any person alleging that he, or any person under or through whom he claims, was the true inventor of any invention included in the claim of the patentee:

(*e*) Any person alleging that he, or any person under or through whom he claims an interest in any trade, business, or manufacture, had publicly manufactured, used, or sold, within this realm, before the date of the patent, anything claimed by the patentee as his invention.

(5) The plaintiff must deliver with his petition particulars of the objections on which he means to rely, and no evidence shall, except by leave of the Court or a judge, be admitted in proof of any objection of which particulars are not so delivered.

(6) Particulars delivered may be from time to time amended by leave of the Court or a judge.

(7) The defendant shall be entitled to begin, and give evidence in support of the patent, and if the plaintiff gives evidence impeaching the validity of the patent the defendant shall be entitled to reply.

(8) Where a patent has been revoked on the ground of fraud, the Comptroller may, on the application of the true inventor made in accordance with the provisions of this Act, grant to him a patent in lieu of and bearing the same date as

the date of revocation of the patent so revoked, but the patent so granted shall cease on the expiration of the term for which the revoked patent was granted.

Crown.

Patent to bind Crown.

27. (1) A patent shall have to all intents the like effect as against her Majesty the Queen, her heirs and successors, as it has against a subject.

(2) But the officers or authorities administering any department of the service of the Crown may, by themselves, their agents, contractors, or others, at any time after the application, use the invention for the services of the Crown on terms to be before or after the use thereof agreed on, with the approval of the Treasury, between those officers or authorities and the patentee, or, in default of such agreement, on such terms as may be settled by the Treasury after hearing all parties interested.

Legal Proceedings.

Hearing with assessor.

28. (1) In an action or proceeding for infringement or revocation of a patent, the Court may, if it thinks fit, and shall, on the request of either of the parties to the proceeding, call in the aid of an assessor specially qualified, and try and hear the case wholly or partially with his assistance; the action shall be tried without a jury unless the Court shall otherwise direct.

(2) The Court of Appeal or the Judicial Committee of the Privy Council may, if they see fit, in any proceeding before them respectively, call in the aid of an assessor as aforesaid.

(3) The remuneration, if any, to be paid to an assessor under this section shall be determined by the Court or the Court of Appeal or Judicial Committee, as the case may be, and be paid in the same manner as the other expenses of the execution of this Act.

Delivery of particulars.

29. (1) In an action for infringement of a patent the plaintiff must deliver with his statement of claim, or by order of the Court or the judge, at any subsequent time, particulars of the breaches complained of.

(2) The defendant must deliver with his statement of

defence, or, by order of the Court or a judge, at any subsequent time, particulars of any objections on which he relies in support thereof.

(3) If the defendant disputes the validity of the patent, the particulars delivered by him must state on what grounds he disputes it, and if one of those grounds is want of novelty, must state the time and place of the previous publication or user alleged by him.

(4) At the hearing no evidence shall, except by leave of the Court or a judge, be admitted in proof of any alleged infringement or objection of which particulars are not so delivered.

(5) Particulars delivered may be from time to time amended, by leave of the Court or a judge.

(6) On taxation of costs regard shall be had to the particulars delivered by the plaintiff and by the defendant; and they respectively shall not be allowed any costs in respect of any particular delivered by them unless the same is certified by the Court or a judge to have been proven or to have been reasonable and proper, without regard to the general costs of the case.

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30. In an action for infringement of a patent, the Court or a judge may on the application of either party make such order for an injunction inspection or account, and impose such terms and give such directions respecting the same and the proceedings thereon as the Court or a judge may see fit.

icate of ty oned and thereon.

31. In an action for infringement of a patent, the Court or a judge may certify that the validity of the patent came in question; and if the Court or a judge so certifies, then in any subsequent action for infringement, the plaintiff in that action on obtaining a final order or judgment in his favour shall have his full costs, charges, and expenses as between solicitor and client, unless the Court or judge trying the action certifies that he ought not to have the same.

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32. Where any person claiming to be the patentee of an invention, by circulars, advertisements, or otherwise threatens any other person with any legal proceedings or liability in respect of any alleged manufacture, use, sale, or purchase of the invention, any person or persons aggrieved thereby may

bring an action against him, and may obtain an injunction against the continuance of such threats, and may recover such damage (if any) as may have been sustained thereby, if the alleged manufacture, use, sale, or purchase to which the threats related was not in fact an infringement of any legal rights of the person making such threats: Provided that this section shall not apply if the person making such threats with due diligence commences and prosecutes an action for infringement of his patent.

Miscellaneous.

Patent for one invention only.

33. Every patent may be in the form in the First Schedule to this Act, and shall be granted for one invention only, but may contain more than one claim; but it shall not be competent for any person in an action or other proceeding to take any objection to a patent on the ground that it comprises more than one invention.

Patent on application of representative of deceased inventor.

34. (1) If a person possessed of an invention dies without making application for a patent for the invention, application may be made by, and a patent for the invention granted to, his legal representative.

(2) Every such application must be made within six months of the decease of such person, and must contain a declaration by the legal representative that he believes such person to be the true and first inventor of the invention.

Patent to first inventor not invalidated by application in fraud of him.

35. A patent granted to the true and first inventor shall not be invalidated by an application in fraud of him, or by provisional protection obtained thereon, or by any use or publication of the invention subsequent to that fraudulent application during the period of provisional protection.

Assignment for particular places.

36. A patentee may assign his patent for any place in or part of the United Kingdom, or Isle of Man, as effectually as if the patent were originally granted to extend to that place or part only.

Loss or destruction of patent.

37. If a patent is lost or destroyed, or its non-production is accounted for to the satisfaction of the Comptroller, the Comptroller may at any time cause a duplicate thereof to be sealed.

ıgs and ɔre law

38. The law officers may examine witnesses on oath and administer oaths for that purpose under this part of this Act, and may from time to time make, alter, and rescind rules regulating references and appeals to the law officers and the practice and procedure before them under this part of this Act; and in any proceeding before either of the law officers under this part of this Act, the law officer may order costs to be paid by either party, and any such order may be made a rule of the Court.

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39. The exhibition of an invention at an industrial or international exhibition, certified as such by the Board of Trade, or the publication of any description of the invention during the period of the holding of the exhibition, or the use of the invention for the purpose of the exhibition in the place where the exhibition is held, or the use of the invention during the period of the holding of the exhibition by any person elsewhere, without the privity or consent of the inventor, shall not prejudice the right of the inventor or his legal personal representative to apply for and obtain provisional protection and a patent in respect of the invention or the validity of any patent granted on the application, provided that both the following conditions are complied with, namely :—

(*a*) The exhibitor must, before exhibiting the invention, give the Comptroller the prescribed notice of his intention to do so ; and

(*b*) The application for a patent must be made before or within six months from the date of the opening of the exhibition.

ɔn of l ndexes,

40. (1) The Comptroller shall cause to be issued periodically an illustrated journal of patented inventions, as well as reports of patent cases decided by courts of law, and any other information that the Comptroller may deem generally useful or important.

(2) Provision shall be made by the Comptroller for keeping on sale copies of such journal, and also of all complete specifications of patents for the time being in force, with their accompanying drawings, if any.

(3) The Comptroller shall continue, in such form as he may deem expedient, the indexes and abridgments of specifications

hitherto published, and shall from time to time prepare and publish such other indexes, abridgments of specifications, catalogues, and other works relating to inventions, as he may see fit.

Patent Museum.

41. The control and management of the existing Patent Museum and its contents shall, from and after the commencement of this Act, be transferred to and vested in the Department of Science and Art, subject to such directions as her Majesty in Council may see fit to give.

Power to require models on payment.

42. The Department of Science and Art may at any time require a patentee to furnish them with a model of his invention on payment to the patentee of the cost of the manufacture of the model; the amount to be settled, in case of dispute, by the Board of Trade.

Foreign vessels in British waters.

43. (1) A patent shall not prevent the use of an invention for the purposes of the navigation of a foreign vessel within the jurisdiction of any of her Majesty's Courts in the United Kingdom, or Isle of Man, or the use of an invention in a foreign vessel within that jurisdiction, provided it is not used therein for or in connection with the manufacture or preparation of anything intended to be sold in or exported from the United Kingdom or Isle of Man.

(2) But this section shall not extend to vessels of any foreign state of which the laws authorise subjects of such foreign state, having patents or like privileges for the exclusive use or exercise of inventions within its territories to prevent or interfere with the use of such inventions in British vessels while in the ports of such foreign state, or in the waters within the jurisdiction of its courts, where such inventions are not so used for the manufacture or preparation of anything intended to be sold in or exported from the territories of such foreign state.

Assignment to Secretary for War of certain inventions.

44. (1) The inventor of any improvement in instruments or munitions of war, his executors, administrators, or assigns (who are in this section comprised in the expression the inventor) may (either for or without valuable consideration) assign to her Majesty's Principal Secretary of State for the War Department (hereinafter referred to as the Secretary of State), on behalf of her Majesty, all the benefit of the invention and

of any patent obtained or to be obtained for the same; and the Secretary of State may be a party to the assignment.

(2) The assignment shall effectually vest the benefit of the invention and patent in the Secretary of State for the time being on behalf of her Majesty, and all covenants and agreements therein contained for keeping the invention secret and otherwise shall be valid and effectual (notwithstanding any want of valuable consideration), and may be enforced accordingly by the Secretary of State for the time being.

(3) Where any such assignment has been made to the Secretary of State, he may at any time before the application for a patent for the invention, or before publication of the specification or specifications, certify to the Comptroller his opinion that, in the interest of the public service, the particulars of the invention and of the manner in which it is to be performed should be kept secret.

(4) If the Secretary of State so certifies, the application and specification or specifications with the drawings (if any), and any amendment of the specification or specifications, and any copies of such documents and drawings, shall, instead of being left in the ordinary manner at the Patent Office, be delivered to the Comptroller in a packet sealed by authority of the Secretary of State.

(5) Such packet shall, until the expiration of the term or extended term during which a patent for the invention may be in force, be kept sealed by the Comptroller, and shall not be opened save under the authority of an order of the Secretary of State, or of the law officers.

(6) Such sealed packet shall be delivered at any time during the continuance of the patent to any person authorised by writing under the hand of the Secretary of State to receive the same, and shall if returned to the Comptroller be again kept sealed by him.

(7) On the expiration of the term or extended term of the patent, such sealed packet shall be delivered to any person authorised by writing under the hand of the Secretary of State to receive it.

(8) Where the Secretary of State certifies as aforesaid, after an application for a patent has been left at the Patent

Office, but before the publication of the specification or specifications, the application, specification, or specifications, with the drawings (if any), shall be forthwith placed in a packet sealed by authority of the Comptroller, and such packet shall be subject to the foregoing provisions respecting a packet sealed by authority of the Secretary of State.

(9) No proceeding by petition or otherwise shall lie for revocation of a patent granted for an invention in relation to which the Secretary of State has certified as aforesaid.

(10) No copy of any specification or other document or drawing, by this section required to be placed in a sealed packet, shall in any manner whatever be published or open to the inspection of the public, but save as in this section otherwise directed, the provisions of this part of this Act shall apply in respect of any such invention and patent as aforesaid.

(11) The Secretary of State may, at any time by writing under his hand, waive the benefit of this section with respect to any particular invention, and the specifications, documents, and drawings shall be thenceforth kept and dealt with in the ordinary way.

(12) The communication of any invention for any improvement in instruments or munitions of war to the Secretary of State, or to any person or persons authorised by him to investigate the same or the merits thereof, shall not, nor shall anything be done for the purposes of the investigation, be deemed use or publication of such invention so as to prejudice the grant or validity of any patent for the same.

Existing Patents.

Provisions respecting existing patents.

45. (1) The provisions of this Act relating to applications for patents and proceedings thereon shall have effect in respect only of applications made after the commencement of this Act.

(2) Every patent granted before the commencement of this Act, or on an application then pending, shall remain unaffected by the provisions of this Act relating to patents binding the Crown, and to compulsory licences.

(3) In all other respects (including the amount and time of payment of fees) this Act shall extend to all patents granted before the commencement of this Act, or on applications then pending, in substitution for such enactments as would have applied thereto if this Act had not been passed.

(4) All instruments relating to patents granted before the commencement of this Act required to be left or filed in the Great Seal Patent Office shall be deemed to be so left or filed if left or filed before or after the commencement of this Act in the Patent Office.

Definitions.

nitions of nt, patentee, invention.

46. In and for the purposes of this Act—

'Patent' means letters patent for an invention :

'Patentee' means the person for the time being entitled to the benefit of a patent:

'Invention' means any manner of new manufacture the subject of letters patent and grant of privilege within section six of the Statute of Monopolies (that is, the Act of the twenty-first year of the reign of King James the First, chapter three, intituled 'An Act concerning monopolies and dispensations with penal laws and the forfeiture thereof'), and includes an alleged invention.

In Scotland 'injunction' means 'interdict.'

[Sections forty-seven to sixty-one relate exclusively to the Registration of Designs, and sections sixty-two to eighty-one exclusively to the Registration of Trade Marks.]

PART V.—General.

Patent Office and Proceedings thereat.

nt Office.

82. (1) The Treasury may provide for the purposes of this Act an office with all requisite buildings and conveniences, which shall be called, and is in this Act referred to as, the Patent Office.

(2) Until a new Patent Office is provided, the offices of the Commissioners of Patents for inventions and for the registration of designs and trade marks existing at the com-

mencement of this Act shall be the Patent Office within the meaning of this Act.

(3) The Patent Office shall be under the immediate control of an officer called the Comptroller-general of patents, designs, and trade marks, who shall act under the superintendence and direction of the Board of Trade.

(4) Any Act or thing directed to be done by or to the Comptroller may, in his absence, be done by or to any officer for the time being in that behalf authorised by the Board of Trade.

Officers and clerks.

83. (1) The Board of Trade may at any time after the passing of this Act, and from time to time, subject to the approval of the Treasury, appoint the Comptroller-general of patents, designs, and trade marks, and so many examiners and other officers and clerks, with such designations and duties as the Board of Trade think fit, and may from time to time remove any of those officers and clerks.

(2) The salaries of those officers and clerks shall be appointed by the Board of Trade, with the concurrence of the Treasury, and the same and the other expenses of the execution of this Act shall be paid out of money provided by Parliament.

Seal of Patent Office.

84. There shall be a seal for the Patent Office, and impressions thereof shall be judicially noticed and admitted in evidence.

Trust not to be entered in registers.

85. There shall not be entered in any register kept under this Act, or be receivable by the Comptroller, any notice of any trust expressed, implied, or constructive.

Refusal to grant patent, &c., in certain cases.

86. The Comptroller may refuse to grant a patent for an invention, or to register a design or trade mark, of which the use would, in his opinion, be contrary to law or morality.

Entry of assignments and transmissions in registers.

87. Where a person becomes entitled by assignment, transmission, or other operation of law to a patent, the Comptroller shall on request, and on proof of title to his satisfaction, cause the name of such person to be entered as proprietor of the patent, in the register of patents. The person for the time being entered in the register of patents, as proprietor of a patent, shall, subject to any rights appearing from such register to be vested in any other person, have

power absolutely to assign, grant licences as to, or otherwise deal with, the same, and to give effectual receipts for any consideration for such assignment, licence, or dealing : Provided that any equities in respect of such patent may be enforced in like manner as in respect of any other personal property.

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gisters.

88. Every register kept under this Act shall at all convenient times be open to the inspection of the public, subject to such regulations as may be prescribed ; and certified copies, sealed with the seal of the Patent Office, of any entry in any such register shall be given to any person requiring the same on payment of the prescribed fee.

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89. Printed or written copies or extracts, purporting to be certified by the Comptroller and sealed with the seal of the Patent Office, of or from patents, specifications, disclaimers, and other documents in the Patent Office, and of or from registers and other books kept there, shall be admitted in evidence in all courts in her Majesty's dominions, and in all proceedings, without further proof or production of the originals.

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90. (1) The Court may on the application of any person aggrieved by the omission without sufficient cause of the name of any person from any register kept under this Act, or by any entry made without sufficient cause in any such register, make such order for making, expunging, or varying the entry, as the Court thinks fit; or the Court may refuse the application ; and in either case may make such order with respect to the costs of the proceedings as the Court thinks fit.

(2) The Court may in any proceeding under this section decide any question that it may be necessary or expedient to decide for the rectification of a register, and may direct an issue to be tried for the decision of any question of fact, and may award damages to the party aggrieved.

(3) Any order of the Court rectifying a register shall direct that due notice of the rectification be given to the Comptroller.

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91. The Comptroller may, on request in writing accompanied by the prescribed fee,—

(*a*) Correct any clerical error in or in connection with an application for a patent ; or

(*b*) Correct any clerical error in the name, style, or address of the registered proprietor of a patent.

(*c*) Cancel the entry or part of the entry of a trade mark on the register: Provided that the applicant accompanies his request by a statutory declaration made by himself, stating his name, address, and calling, and that he is the person whose name appears on the register as the proprietor of the said trade mark.

[Section 92 relates to the alteration of a registered trade mark.]

Falsification of entries in registers.

93. If any person makes or causes to be made a false entry in any register kept under this Act, or a writing falsely purporting to be a copy of an entry in any such register, or produces or tenders or causes to be produced or tendered in evidence any such writing, knowing the entry or writing to be false, he shall be guilty of a misdemeanor.

Exercise of discretionary power by Comptroller.

94. Where any discretionary power is by this Act given to the Comptroller he shall not exercise that power adversely to the applicant for a patent, or for amendment of a specification, without (if so required within the prescribed time by the applicant) giving the applicant an opportunity of being heard personally or by his agent.

Power of Comptroller to take directions of law officers.

95. The Comptroller may, in any case of doubt or difficulty arising in the administration of any of the provisions of this Act, apply to either of the law officers for directions in the matter.

Certificate of Comptroller to be evidence.

96. A certificate purporting to be under the hand of the Comptroller as to any entry, matter, or thing which he is authorised by this Act, or any general rules made thereunder, to make or do, shall be primâ facie evidence of the entry having been made, and of the contents thereof, and of the matter or thing having been done or left undone.

Applications and notices by post.

97. (1) Any application, notice, or other document authorised or required to be left, made, or given at the Patent Office or to the Comptroller, or to any other person under this Act, may be sent by a prepaid letter through the post; and if so sent shall be deemed to have been left, made, or

given respectively at the time when the letter containing the same would be delivered in the ordinary course of post.

(2) In proving such service or sending, it shall be sufficient to prove that the letter was properly addressed and put into the post.

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98. Whenever the last day fixed by this Act, or by any rule for the time being in force, for leaving any document or paying any fee at the Patent Office shall fall on Christmas day, Good Friday, or on a Saturday or Sunday, or any day observed as a holiday at the Bank of England, or any day observed as a day of public fast or thanksgiving, herein referred to as excluded days, it shall be lawful to leave such document or to pay such fee on the day next following such excluded day, or days if two or more of them occur consecutively.

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99. If any person is, by reason of infancy, lunacy, or other inability, incapable of making any declaration or doing anything required or permitted by this Act or by any rules made under the authority of this Act, then the guardian or committee (if any) of such incapable person, or if there be none, any person appointed by any court or judge possessing jurisdiction in respect of the property of incapable persons, upon the petition of any person on behalf of such incapable person, or of any other person interested in the making such declaration or doing such thing, may make such declaration or a declaration as nearly corresponding thereto as circumstances permit, and do such thing in the name and on behalf of such incapable person, and all acts done by such substitute shall for the purposes of this Act be as effectual as if done by the person for whom he is substituted.

smission of fied printed s of specifi- ns, &c.

100. Copies of all specifications, drawings, and amendments left at the Patent Office after the commencement of this Act, printed for and sealed with the seal of the Patent Office, shall be transmitted to the Edinburgh Museum of Science and Art, and to the Enrolments Office of the Chancery Division in Ireland, and to the Rolls Office in the Isle of Man, within twenty-one days after the same shall respectively have been accepted or allowed at the Patent Office; and certified copies of or extracts from any such documents

shall be given to any person requiring the same on payment of the prescribed fee; and any such copy or extract shall be admitted in evidence in all courts in Scotland and Ireland and in the Isle of Man without further proof or production of the originals.

Power for Board of Trade to make general rules for classifying goods and regulating business of Patent Office.

101. (1) The Board of Trade may from time to time make such general rules and do such things as they think expedient, subject to the provisions of this Act—

(*a*) For regulating the practice of registration under this Act:

(*b*) For classifying goods for the purposes of designs and trade marks:

(*c*) For making or requiring duplicates of specifications, amendment (*sic*), drawings, and other documents:

(*d*) For securing and regulating the publishing and selling of copies, at such prices and in such manner as the Board of Trade think fit, of specifications, drawings, amendments, and other documents:

(*e*) For securing and regulating the making, printing, publishing, and selling of indexes to, and abridgments of, specifications and other documents in the Patent Office; and providing for the inspection of indexes and abridgments and other documents:

(*f*) For regulating (with the approval of the Treasury) the presentation of copies of Patent Office publications to patentees and to public authorities, bodies, and institutions at home and abroad:

(*g*) Generally for regulating the business of the Patent Office, and all things by this Act placed under the direction or control of the Comptroller, or of the Board of Trade.

(2) Any of the forms in the First Schedule to this Act may be altered or amended by rules made by the Board as aforesaid.

(3) General rules may be made under this section at any time after the passing of this Act, but not so as to take effect before the commencement of this Act, and shall (subject as hereinafter mentioned) be of the same effect as if they were contained in this Act, and shall be judicially noticed.

(4) Any rules made in pursuance of this section shall be laid before both Houses of Parliament, if Parliament be in session at the time of making thereof, or if not, then as soon as practicable after the beginning of the then next session of Parliament, and they shall also be advertised twice in the official journal to be issued by the Comptroller.

(5) If either House of Parliament, within the next forty days after any rules have been so laid before such House, resolve that such rules or any of them ought to be annulled, the same shall after the date of such resolution be of no effect, without prejudice to the validity of anything done in the meantime under such rules or rule, or to the making of any new rules or rule.

nal reports comptroller.

102. The Comptroller shall, before the first day of June in every year, cause a report respecting the execution by or under him of this Act to be laid before both Houses of Parliament, and therein shall include for the year to which each report relates all general rules made in that year under or for the purposes of this Act, and an account of all fees, salaries, and allowances, and other money received and paid under this Act.

International and Colonial Arrangements.

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103. (1) If her Majesty is pleased to make any arrangement with the government or governments of any foreign state or states for mutual protection of inventions, then any person who has applied for protection for any invention in any such state, shall be entitled to a patent for his invention under this Act, in priority to other applicants; and such patent shall have the same date as the date of the protection obtained in such foreign state.

Provided that his application is made, in the case of a patent within seven months from his applying for protection in the foreign state with which the arrangement is in force.

Provided that nothing in this section contained shall entitle the patentee to recover damages for infringements happening prior to the date of the actual acceptance of his complete specification in this country, as the case may be.

(2) The publication in the United Kingdom, or the Isle of Man during the respective periods aforesaid of any description of the invention, or the use therein during such periods of the invention, shall not invalidate the patent which may be granted for the invention.

(3) The application for the grant of a patent under this section, must be made in the same manner as an ordinary application under this Act.

(4) The provisions of this section shall apply only in the case of those foreign states with respect to which her Majesty shall from time to time by Order in Council declare them to be applicable, and so long only in the case of each state as the Order in Council shall continue in force with respect to that state.

Provision for colonies and India.

104. (1) Where it is made to appear to her Majesty that the legislature of any British possession has made satisfactory provision for the protection of inventions, patented in this country, it shall be lawful for her Majesty from time to time, by Order in Council, to apply the provisions of the last preceding section, with such variations or additions, if any, as to her Majesty in Council may seem fit, to such British possession.

(2) An Order in Council under this Act shall, from a date to be mentioned for the purpose in the Order, take effect as if its provisions had been contained in this Act; but it shall be lawful for her Majesty in Council to revoke any Order in Council made under this Act.

Offences.

Penalty on falsely representing articles to be patented.

105. (1) Any person who represents that any article sold by him is a patented article, when no patent has been granted for the same, shall be liable for every offence on summary conviction to a fine not exceeding five pounds.

(2) A person shall be deemed, for the purposes of this enactment, to represent that an article is patented if he sells the article with the word 'patent,' 'patented,' or any word or words expressing or implying that a patent has been obtained for the article stamped, engraved, or impressed on, or otherwise applied to, the article.

106. Any person who, without the authority of her Majesty, or any of the Royal Family, or of any Government Department, assumes or uses in connection with any trade, business, calling, or profession, the royal arms, or arms so nearly resembling the same as to be calculated to deceive, in such a manner as to be calculated to lead other persons to believe that he is carrying on his trade, business, calling, or profession by or under such authority as aforesaid, shall be liable on summary conviction to a fine not exceeding twenty pounds.

Scotland, Ireland, &c.

107. In any action for infringement of a patent in Scotland the provisions of this Act, with respect to calling in the aid of an assessor, shall apply, and the action shall be tried without a jury, unless the court shall otherwise direct, but otherwise nothing shall affect the jurisdiction and forms of process of the courts in Scotland in such an action, or in any action or proceeding respecting a patent hitherto competent to those courts.

For the purposes of this section 'court of appeal' shall mean any court to which such action is appealed.

108. In Scotland any offence under this Act declared to be punishable on summary conviction may be prosecuted in the sheriff court.

109. (1) Proceedings in Scotland for revocation of a patent shall be in the form of an action of reduction at the instance of the Lord Advocate, or at the instance of a party having interest with his concurrence, which concurrence may be given on just cause shown only.

(2) Service of all writs and summonses in that action shall be made according to the forms and practice existing at the commencement of this Act.

110. All parties shall, notwithstanding anything in this Act, have in Ireland their remedies under or in respect of a patent as if the same had been granted to extend to Ireland only.

111. (1) The provisions of this Act conferring a special jurisdiction on the court as defined by this Act, shall not

except so far as the jurisdiction extends, affect the jurisdiction of any court in Scotland or Ireland in any proceedings relating to patents or to designs or to trade marks; and with reference to any such proceedings in Scotland, the term 'the Court' shall mean any Lord Ordinary of the Court of Session, and the term 'Court of Appeal' shall mean either Division of the said Court; and with reference to any such proceedings in Ireland, the terms 'the Court' and 'the Court of Appeal' respectively mean the High Court of Justice in Ireland and Her Majesty's Court of Appeal in Ireland.

(2) If any rectification of a register under this Act is required in pursuance of any proceeding in a court in Scotland or Ireland, a copy of the order, decree, or other authority for the rectification shall be served on the Comptroller, and he shall rectify the register accordingly.

Isle of Man.

112. This Act shall extend to the Isle of Man, and—

(1) Nothing in this Act shall affect the jurisdiction of the courts in the Isle of Man, in proceedings for infringement, or in any action or proceeding respecting a patent, design, or trade mark competent to those courts;

(2) The punishment for a misdemeanor under this Act in the Isle of Man shall be imprisonment for any term not exceeding two years, with or without hard labour, and with or without a fine not exceeding one hundred pounds, at the discretion of the court;

(3) Any offence under this Act committed in the Isle of Man which would in England be punishable on summary conviction may be prosecuted, and any fine in respect thereof recovered at the instance of any person aggrieved, in the manner in which offences punishable on summary conviction may for the time being be prosecuted.

Repeal; Transitional Provisions; Savings.

Repeal and saving for past operation of repealed enactments, &c.

113. The enactments described in the Third Schedule to this Act are hereby repealed. But this repeal of enactments shall not—

(*a*) Affect the past operation of any of those enactments,

or any patent granted, or application pending, or appointment made, or compensation granted, or order or direction made or given, or right, privilege, obligation, or liability acquired, accrued, or incurred, or anything duly done or suffered under or by any of those enactments before or at the commencement of this Act; or

(*b*) Interfere with the institution or prosecution of any action or proceeding, civil or criminal, in respect thereof, and any such proceeding may be carried on as if this Act had not been passed; or

(*c*) Take away or abridge any protection or benefit in relation to any such action or proceeding.

er registers deemed ued.

114. The registers of patents and of proprietors kept under any enactment repealed by this Act shall respectively be deemed parts of the same book as the register of patents kept under this Act.

g for ng rules.

115. All general rules made by the Lord Chancellor or by any other authority under any enactment repealed by this Act, and in force at the commencement of this Act, may at any time after the passing of this Act be repealed, altered, or amended by the Board of Trade, as if they had been made by the Board under this Act, but so that no such repeal, alteration, or amendment shall take effect before the commencement of this Act; and, subject as aforesaid, such general rules shall, so far as they are consistent with and are not superseded by this Act, continue in force as if they had been made by the Board of Trade under this Act.

g for rative.

116. Nothing in this Act shall take away, abridge, or prejudicially affect the prerogative of the Crown in relation to the granting of any letters patent or to the withholding of a grant thereof.

General Definitions.

al ions.

117. In and for the purposes of this Act, unless the context otherwise requires,—

'Person' includes a body corporate:

'The Court' means (subject to the provisions for Scotland,

Ireland, and the Isle of Man) her Majesty's High Court of Justice in England :

'Law officer' means her Majesty's Attorney General or Solicitor General for England :

'The Treasury' means the Commissioners of her Majesty's Treasury :

'Comptroller' means the Comptroller-General of Patents, Designs, and Trade Marks :

'Prescribed' means prescribed by any of the schedules to this Act, or by general rules under or within the meaning of this Act :

'British possession' means any territory or place situate within her Majesty's dominions, and not being or forming part of the United Kingdom, or of the Channel Islands, or of the Isle of Man, and all territories and places under one legislature, as hereinafter defined, are deemed to be one British possession for the purposes of this Act :

'Legislature' includes any person or persons who exercise legislative authority in the British possessions ; and where there are local legislatures as well as a central legislature, means the central legislature only.

In the application of this Act to Ireland, 'summary conviction' means a conviction under the Summary Jurisdiction Acts, that is to say, with reference to the Dublin Metropolitan Police District the Acts regulating the duties of justices of the peace and of the police for such district, and elsewhere in Ireland the Petty Sessions (Ireland) Act, 1851, and any Act amending it.

SCHEDULES.

THE FIRST SCHEDULE.

FORMS OF APPLICATION, &c.

on 5. For the Forms A B and C the Patents Rules, 1883, have substituted the Forms A, A1, B and C. *See* pp. 379 to 382.

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on 33.

Form D.

FORM OF PATENT.

VICTORIA, by the grace of God, of the United Kingdom of Great Britain and Ireland, Queen, Defender of the Faith: To all to whom these presents shall come greeting:

Whereas *John Smith*, of 29 *Perry Street, Birmingham*, in the county of *Warwick, Engineer*, hath by his solemn declaration represented unto us that he is in possession of an invention for '*Improvements in Sewing Machines*,' that he is the true and first inventor thereof, and that the same is not in use by any other person to the best of his knowledge and belief:

And whereas the said inventor hath humbly prayed that we would be graciously pleased to grant unto him (hereinafter together with his executors, administrators, and assigns, or any of them, referred to as the said patentee) our Royal Letters Patent for the sole use and advantage of his said invention:

And whereas the said inventor hath by and in his complete specification particularly described the nature of his invention:

And whereas we being willing to encourage all inventions which may be for the public good, are graciously pleased to condescend to his request:

Know ye, therefore, that We, of our especial grace, certain knowledge, and mere motion, do by these presents, for us, our heirs and successors, give and grant unto the said patentee our especial

licence, full power, sole privilege, and authority, that the said patentee by himself, his agents, or licensees, and no others, may at all times hereafter during the term of years herein mentioned, make, use, exercise, and vend the said invention within our United Kingdom of Great Britain and Ireland, and Isle of Man, in such manner as to him or them may seem meet, and that the said patentee shall have and enjoy the whole profit and advantage from time to time accruing by reason of the said invention, during the term of fourteen years from the date hereunder written of these presents: And to the end that the said patentee may have and enjoy the sole use and exercise and the full benefit of the said invention, We do by these presents for us, our heirs and successors, strictly command all our subjects whatsoever within our United Kingdom of Great Britain and Ireland, and the Isle of Man, that they do not at any time during the continuance of the said term of fourteen years either directly or indirectly make use of or put in practice the said invention, or any part of the same, nor in anywise imitate the same, nor make or cause to be made any addition thereto or subtraction therefrom, whereby to pretend themselves the inventors thereof, without the consent, licence, or agreement of the said patentee in writing under his hand and seal, on pain of incurring such penalties as may be justly inflicted on such offenders for their contempt of this our Royal command, and of being answerable to the patentee according to law for his damages thereby occasioned: Provided that these our letters patent are on this condition, that, if at any time during the said term it be made to appear to us, our heirs or successors, or any six or more of our Privy Council, that this our grant is contrary to law, or prejudicial or inconvenient to our subjects in general, or that the said invention is not a new invention as to the public use and exercise thereof within our United Kingdom of Great Britain and Ireland, and Isle of Man, or that the said patentee is not the first and true inventor thereof within this realm as aforesaid, these our letters patent shall forthwith determine, and be void to all intents and purposes, notwithstanding anything hereinbefore contained: Provided also, that if the said patentee shall not pay all fees by law required to be paid in respect of the grant of these letters patent, or in respect of any matter relating thereto at the time or times, and in manner for the time being by law provided; and also if the said patentee shall not supply or cause to be supplied, for our service all such articles of the said invention as may be required by the officers or commissioners administering any department of our service in such manner, at such times, and at and

upon such reasonable prices and terms as shall be settled in manner for the time being by law provided, then, and in any of the said cases, these our letters patent, and all privileges and advantages whatever hereby granted shall determine and become void notwithstanding anything hereinbefore contained: Provided also, that nothing herein contained shall prevent the granting of licenses in such manner and for such considerations as they may by law be granted: And lastly, we do by these presents for us, our heirs and successors, grant unto the said patentee that these our letters patent shall be construed in the most beneficial sense for the advantage of the said patentee. In witness whereof we have caused these our letters to be made patent this
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Seal of Patent Office.

ion 24.

THE SECOND SCHEDULE.

FEES.

For this schedule the First Schedule to the Patents Rules, 1883, has been substituted. *See* p. 376.

Section 113.

THE THIRD SCHEDULE.

ENACTMENTS REPEALED.

21 James I. c. 3. [1623.]	The Statute of Monopolies. In part; namely,— Sections ten, eleven, and twelve.
5 & 6 Will. IV. c. 62. [1835.] In part.	The Statutory Declarations Act, 1835. In part; namely,— Section eleven.
5 & 6 Will. IV. c. 83. [1835.]	An Act to amend the law touching letters patent for inventions.
2 & 3 Vict. c. 67. [1839.]	An Act to amend an Act of the fifth and sixth years of the reign of King William the Fourth, intituled 'An Act to amend the law touching letters patent for inventions.'
. . . .	. . . .
7 & 8 Vict. c. 69. (*a*) [1844.] In part.	An Act for amending an Act passed in the fourth year of the reign of his late Majesty, intituled 'An Act for the better administration of justice in his Majesty's Privy Council, and to extend its jurisdiction and powers.' In part; namely,— Sections two to five, both included.
. . . .	. . . .
15 & 16 Vict. c. 83. [1852.]	The Patent Law Amendment Act, 1852.
16 & 17 Vict. c. 5. [1853.]	An Act to substitute stamp duties for fees on passing letters patent for inventions, and to provide for the purchase for the public use of certain indexes of specifications.

(*a*) NOTE.—Sections six and seven of this Act are repealed by the Statute Law Revision (No. 2) Act, 1874.

16 & 17 Vict. c. 115. [1853.]	An Act to amend certain provisions of the Patent Law Amendment Act, 1852, in respect of the transmission of certified copies of letters patent and specifications to certain offices in Edinburgh and Dublin, and otherwise to amend the said Act.
	. . . .
22 Vict. c. 13. [1859.]	An Act to amend the law concerning patents for inventions with respect to inventions for improvements in instruments and munitions of war.
28 & 29 Vict. c. 3. [1865.]	The Industrial Exhibitions Act, 1865.
33 & 34 Vict. c. 27. [1870.]	The Protection of Inventions Act, 1870.
	. . . .
43 & 44 Vict. c. 10. [1880.]	The Great Seal Act, 1880. In part; namely,— Section five.
	. . . .

RULES RELATING TO APPLICATIONS FOR PATENTS FOR INVENTIONS AND PROCEEDINGS THEREON, AND REGISTRATION OF PATENTS; WITH LIST OF FEES, AND RULES FOR APPEALS TO THE LAW OFFICERS.

By virtue of the provisions of the Patents, Designs, and Trade Marks Act, 1883, the Board of Trade do hereby make the following Rules:—

Short Title.

Short title.

1. These Rules may be cited as the Patents Rules, 1883.

Commencement.

Commencement.

2. These Rules shall come into operation from and immediately after the 31st day of December 1883.

Interpretation.

Interpretation.

3. In the construction of these Rules, any words herein used defined by the said Act shall have the meanings thereby assigned to them respectively.

Fees.

Fees.

4. The fees to be paid under the above-mentioned Act, in addition to the fees mentioned in the Second Schedule thereto, so far as it relates to patents, shall be those specified in the list of fees in the First Schedule to these Rules.

Forms.

Forms. Alterations.

5. The Forms A, B, and C in the First Schedule to the said Act shall be altered or amended by the substitution therefor respectively of the Forms A, A1, B, and C in the Second Schedule hereto.

Application.

6. (1) An application for a patent shall be made either in the Form A or the Form A1 set forth in the Second Schedule hereto, as the case may be.

fication. 2. The Form B in such schedule of provisional specification and the Form C of complete specification shall respectively be used.

r forms. (3) The remaining forms set forth in such schedule may, as far as they are applicable, be used in any proceedings under these Rules.

General.

s of ess. 7. The Patent Office shall be open to the public every week day during the hours of ten and four, except on the days and times following :—

Christmas day.
Good Friday.
The day observed as her Majesty's birthday.
The days observed as days of public fast or thanksgiving, or as holidays at the Bank of England.

icy. 8. An application for a patent must be signed by the applicant, but all other communications between the applicant and the Comptroller, and all attendances by the applicant upon the Comptroller, may be made by or through an agent duly authorised to the satisfaction of the Comptroller, and if he so require resident in the United Kingdom.

inent of ess. 9. The application shall be accompanied by a statement of an address to which all notices, requisitions, and communications of every kind may be made by the Comptroller or by the Board of Trade, and such statement shall thereafter be binding upon the applicant unless and until a substituted statement of address shall be furnished by him to the Comptroller. He may in any particular case require that the address mentioned in this rule be in the United Kingdom.

&c., of ments. 10. All documents and copies of documents sent to or left at the Patent Office or otherwise furnished to the Comptroller or to the Board of Trade shall be written or printed in large and legible characters in the English language upon strong wide ruled paper (on one side only), of a size of 13 inches by 8 inches, leaving a margin of two inches on the left-hand part thereof, and the signature of the applicants or agents thereto must be written in a large and legible

hand. Duplicate documents shall at any time be left, if required by the Comptroller.

Exercise of discretionary power by Comptroller.
Notice of hearing.

11. Before exercising any discretionary power given to the Comptroller by the said Act adversely to the applicant for a patent or for amendment of a specification, the Comptroller shall give ten days' notice, or such longer notice as he may think fit, to the applicant of the time when he may be heard personally or by his agent before the Comptroller.

Notice by applicant.

12. Within five days from the date when such notice would be delivered in the ordinary course of post, or such longer time as the Comptroller may appoint in such notice, the applicant shall notify to the Comptroller whether or not he intends to be heard upon the matter.

Comptroller may require statement, &c.

13. Whether the applicant desires to be heard or not, the Comptroller may at any time require him to submit a statement in writing within a time to be notified by the Comptroller, or to attend before him and make oral explanations with respect to such matters as the Comptroller may require.

Decision to be notified to parties.

14. The decision or determination of the Comptroller in the exercise of any such discretionary power as aforesaid shall be notified by him to the applicant, and any other person affected thereby.

Definition of 'applicant.'

15. The term 'applicant' in Rules 11, 12, and 13 shall include an applicant whose specification bears a title the same as or similar to that of the specification of a prior applicant, and has been reported on by the examiner.

Prior and second applicant may attend hearing.

16. Such prior and second applicant respectively may attend the hearing of the question whether the invention comprised in both applications is the same, but neither party shall be at liberty to inspect the specification of the other.

Industrial or International Exhibitions.

17. Any person desirous of exhibiting an invention at an industrial or international exhibition, or of publishing any description of the invention during the period of the holding of the exhibition, or of using the invention for the purpose of the exhibition in the place where the exhibition is held, shall, after having obtained from the Board of Trade a certificate that the exhibition is an industrial or international one, give to the Comptroller seven days' notice of his intention to exhibit, publish, or use the invention, as the case may be.

For the purpose of identifying the invention in the event of an application for a patent being subsequently made the applicant shall furnish to the Comptroller a brief description of his invention, accompanied, if necessary, by drawings, and such other information as the comptroller may in each case require.

of amend- &c.

18. Any document for the amending of which no special provision is made by the said Act may be amended, and any irregularity in procedure, which in the opinion of the Comptroller may be obviated without detriment to the interests of any person, may be corrected, if and on such terms as the Comptroller may think fit.

ents by

19. Any application, notice, or other document authorised or required to be left, made, or given at the Patent Office or to the Comptroller or to any other person under these Rules may be sent by a prepaid letter through the post, and if so sent shall be deemed to have been left, made, or given respectively at the time when the letter containing the same would be delivered in the ordinary course of post.

In proving such service or sending it shall be sufficient to prove that the letter was properly addressed and put into the post.

its.

20. Affidavits may, except where otherwise prescribed by these Rules, be used as evidence in any proceedings thereunder when sworn to in any of the following ways, viz.:—

(1) In the United Kingdom before any person authorised to administer oaths in the Supreme Court of Judicature or before a justice of the peace for the county or place where it is sworn or made.

(2) In any place in the British dominions out of the United Kingdom before any court, judge, or justice of the peace, or any person authorised to administer oaths there in any court.

(3) In any place out of the British dominions before a British minister, or person exercising the functions of a British minister, or a British consul, vice-consul, or other person exercising the functions of a British consul, or a notary public, or before a judge or magistrate.

Statutory declarations.

21. Where any statutory declaration prescribed by these Rules, or used in any proceedings thereunder, is made out of the United Kingdom, the words 'and by virtue of the Statutory Declarations Act, 1835,' must be omitted, and the declaration shall (unless the context otherwise requires) be made in the manner prescribed in Rule 20, subsection (3).

Application with Provisional or Complete Specification.

Order of recording applications.

22. Applications for a patent sent by prepaid letter through the post shall, as far as may be practicable, be opened and numbered in the order in which the letters containing the same have been respectively delivered in the ordinary course of post.

Applications left at the Patent Office otherwise than through the post shall be in like manner numbered in the order of their receipt at the Patent Office.

Application for separate patents by way of amendment.

23. Where a person making application for a patent includes therein by mistake, inadvertence, or otherwise, more than one invention, he may, after the refusal of the Comptroller to accept such application, amend the same so as to apply to one invention only, and may make application for separate patents for each such invention accordingly.

Every such application shall bear the date of the first application, and shall, together therewith, be proceeded with in the manner prescribed by the said Act and by these Rules as if every such application had been originally made on that date for one invention only.

Application by representative of deceased inventor.

24. An application for a patent by the legal representative of a person who has died possessed of an invention shall be accompanied by an official copy of or extract from his will or the letters of administration granted of his estate and effects in proof of the applicant's title as such legal representative.

Notice and advertisement of acceptance.

25. On the acceptance of an application with a provisional or complete specification the Comptroller shall give notice thereof to the applicant, and shall advertise such acceptance in the official journal of the Patent Office.

Inspection on acceptance of complete specification.

26. Upon the publication of such advertisement of acceptance in the case of an application with a complete speci-

fication, the application and specification or specifications with the drawings (if any) may be inspected at the Patent Office upon payment of the prescribed fee.

Application on Communication from Abroad.

unnication abroad.

27. An application for a patent for an invention communicated from abroad shall be made in the form A1 set forth in the Second Schedule hereto.[1]

Sizes and Methods of preparing Drawings accompanying Provisional or Complete Specifications.

f drawings.

28. The drawings accompanying provisional or complete specifications shall be made upon half-sheets or sheets of imperial drawing paper, to be within a border line of 19 inches by 12 inches, or 27 inches by 19 inches, with a margin of $\frac{1}{2}$ an inch all round.

s of ings.

29. A copy of the drawings will be required upon *rolled* imperial drawing paper or upon thin Bristol board of the same dimensions as the original drawing or drawings. All the lines must be absolutely black, Indian ink of the best quality to be used, and the same strength or colour of the ink maintained throughout the drawing. Any shading must be in lines clearly and distinctly drawn, and as open as is consistent with the required effect. Section lines should not be too closely drawn. No colour must be used for any purpose upon the copy of the drawings. All letters and figures of reference must be bold and distinct. The border line should be one fine line only. The drawings must not be folded, but must be delivered at the Patent Office either in a perfectly flat state, or rolled upon a roller so as to be free from creases or breaks [2]

30. Where a complete specification is left at the Patent Office after a provisional specification has been accepted, the complete specification and drawing or drawings accompanying

[1] The Patent Office has recently given notice that applicants using Form A1, must be resident in the United Kingdom.

[2] As the drawings accompanying the provisional and complete specification respectively are copied at the Patent Office for publication by the process of photo-lithography, this rule must be strictly observed in order that correct copies may be made.

the same, as well as the copy thereof, must be prepared in accordance with Rules 10, 28, and 29.

Illustrated Journal.

Additional drawing to be furnished.

31. Every applicant for the grant of a patent shall, in addition to the drawings to be furnished with his complete specification, furnish the Comptroller with a drawing illustrative of the feature or features of novelty constituting his invention. Such drawing must be prepared in the manner prescribed for the copy of the original drawing or drawings accompanying the specification, but must not cover a space exceeding 16 square inches. The drawing must be accompanied by a concise explanatory statement on foolscap paper, and legibly written or printed.[1]

Opposition to Grants of Patents.

Notice of opposition.

32. A notice of opposition to the grant of a patent shall state the ground or grounds on which the person giving such notice (hereinafter called the opponent) intends to oppose the grant, and shall be signed by him. Such notice shall state his address for service in the United Kingdom.

Copy for applicant.

33. On receipt of such notice a copy thereof shall be furnished by the Comptroller to the applicant.

Particulars of prior patent.

34. Where the ground or one of the grounds of opposition is that the invention has been patented in this country on an application of prior date, the title, number, and date of the patent granted in such prior application shall be specified in the notice.

Opponent's evidence.

35. Within 14 days after the expiration of two months from the date of the advertisement of the acceptance of a complete specification, the opponent shall leave at the Patent Office statutory declarations in support of his opposition, and deliver to the applicant a list thereof.

Applicant's evidence.

36. Within 14 days from the delivery of such list the applicant shall leave at the Patent Office statutory declarations in answer, and deliver to the opponent a list thereof, and within seven days from such delivery the opponent shall leave at the Patent Office his statutory declarations in reply,

Evidence in reply.

[1] The office now dispense with the concise explanatory statement.

and deliver to the applicant a list thereof. Such last-mentioned declarations shall be confined to matters strictly in reply.

Copies of the declarations mentioned in this and the last preceding Rule may be obtained either from the Patent Office or from the opposite party.

ıg of nce.

37. No further evidence shall be left on either side except by leave of the Comptroller upon the written consent of the parties duly notified to him, or by special leave of the Comptroller on application made to him for that purpose.

38. Either party making such application shall give notice thereof to the opposite party, who shall be entitled to oppose the application.

e of ng.

39. On the completion of the evidence the Comptroller shall appoint a time for the hearing of the case, and shall give to the parties seven days' notice at the least of such appointment.

lowance of ition in in cases.

40. On the hearing of the case no opposition shall be allowed in respect of any ground not stated in the notice of opposition; and where the ground or one of the grounds is that the invention has been patented in this country on an application of prior date, the opposition shall not be allowed upon such ground unless the title, number, and date of the patent granted on such prior application shall have been duly specified in the notice of opposition.

ion to be ed to s.

41. The decision of the Comptroller in the case shall be notified by him to the parties.

Certificates of Payment or Renewal.

ent of fees . and 100*l.* ntinuance ent.

42. If a patentee intends at the expiration of the fourth or eighth year from the date of his patent to make the prescribed payment for keeping the same in force, he shall, seven days at least before such expiration, give notice to the Comptroller of such intention, and shall, before the expiration of such fourth or eighth year, as the case may be, leave at the Patent Office a form of certificate of payment, duly stamped, subject as hereinafter provided, with the prescribed fee of 50*l.* or 100*l.* as the case may be.

As to patents granted before commencement of Act.

43. In the case of patents granted before the commencement of the said Act, the above Rule shall be read as if the words 'seventh year' were therein written instead of the words 'eighth year.'

Payment of annual fees in lieu of 50*l.* and 100*l.*

44. If the patentee intends to pay annual fees in lieu of the above-mentioned fees of 50*l.* and 100*l.*, he shall, seven days at least before the expiration of the fourth and each succeeding year during the term of the patent, until and inclusive of the thirteenth year thereof, give notice to the Comptroller of such intention, and shall, before the expiration of such respective periods as aforesaid, leave at the Patent Office a form of certificate of payment, duly stamped with the fee prescribed to be paid at such periods respectively.

Certificate payment.

45. On due compliance with these Rules, and as soon as may be after such respective periods as aforesaid, or any enlargement thereof respectively duly granted, the Comptroller shall give to the patentee a certificate that the prescribed payment has been duly made.

Enlargement of Time.

Enlargement of time for payments.

46. An application for an enlargement of the time for making a prescribed payment shall state in detail the circumstances in which the patentee by accident, mistake, or inadvertence has failed to make such payment, and the Comptroller may require the patentee to substantiate by such proof as he may think necessary the allegations contained in the application for enlargement.

In other cases.

47. The time prescribed by these Rules for doing any act, or taking any proceeding thereunder, may be enlarged by the Comptroller if he think fit, and upon such notice to other parties, and proceedings thereon, and upon such terms, as he may direct.

Amendment of Specification.

Request for leave to amend.

48. A request for leave to amend a specification shall be signed by the applicant or patentee and accompanied by a copy of the original specification and drawings, showing in red ink the proposed amendment, and shall be advertised by pub-

lication of the request and the nature of the proposed amendment in the official journal of the Patent Office, and in such other manner (if any) as the Comptroller may in each case direct.

49. A notice of opposition to the amendment shall state the ground or grounds on which the person giving such notice (hereinafter called the opponent) intends to oppose the amendment, and shall be signed by him. Such notice shall state his address for service in the United Kingdom.

50. On receipt of such notice a copy thereof shall be furnished by the Comptroller to the applicant or patentee, as the case may be (hereinafter called the applicant).

51. Within 14 days after the expiration of one month from the first advertisement of the application for leave to amend, the opponent shall leave at the Patent Office statutory declarations in support of his opposition, and deliver to the applicant a list thereof.

52. Upon such declarations being left, and such list being delivered, the provisions of Rules 36, 37, 38, and 39 shall apply to the case, and the further proceedings therein shall be regulated in accordance with such provisions as if they were here repeated.

53. The decision of the Comptroller in the case shall be notified by him to the parties.

54. Where leave to amend is given the applicant shall, if the Comptroller so require, and within a time to be limited by him, leave at the Patent Office a new specification and drawings as amended, to be prepared in accordance with Rules 10, 28, and 29.

55. Where a request for leave to amend is made by or in pursuance of an order of the Court or a judge, an official or verified copy of the order shall be left with the request at the Patent Office.

56. Every amendment of a specification shall be forthwith advertised by the Comptroller in the official journal of the Patent Office, and in such other manner (if any) as the Comptroller may direct.

Compulsory Licences.

Petition for compulsory grant of licences.

57. A petition to the Board of Trade for an order upon a patentee to grant a licence shall show clearly the nature of the petitioner's interest, and the ground or grounds upon which he claims to be entitled to relief, and shall state in detail the circumstances of the case, the terms upon which he asks that an order may be made, and the purport of such order.

To be left with evidence at Patent Office.

58. The petition and an examined copy thereof shall be left at the Patent Office, accompanied by the affidavits or statutory declarations, and other documentary evidence (if any) tendered by the petitioner in proof of the alleged default of the patentee.

Directions as to further proceedings unless petition refused.

59. Upon perusing the petition and evidence, unless the Board of Trade shall be of opinion that the order should be at once refused, they may require the petitioner to attend before the Comptroller, or other person or persons appointed by them, to receive his or their directions as to further proceedings upon the petition.

Procedure.

60. If and when a *primâ facie* case for relief has been made out to the satisfaction of the Board of Trade, the petitioner shall upon their requisition, and on or before a day to be named by them, deliver to the patentee copies of the

Petitioner's evidence.

petition and of the affidavits or statutory declarations and other documentary evidence (if any) tendered in support thereof.

Patentee's evidence.

61. Within 14 days after the day of such delivery the patentee shall leave at the Patent Office his affidavits or statutory declarations in opposition to the petition, and deliver copies thereof to the petitioner.

Evidence in reply.

62. The petitioner within 14 days from such delivery shall leave at the Patent Office his affidavits, or statutory declarations in reply, and deliver copies thereof to the petitioner; such last-mentioned affidavits or declarations shall be confined to matters strictly in reply.

Further proceedings.

63. Subject to any further directions which the Board of Trade may give the parties shall then be heard at such time, before such person or persons, in such manner, and in ac-

cordance with such procedure as the Board of Trade may, in the circumstances of the case, direct, but so that full opportunity shall be given to the patentee to show cause against the petition.

Register of Patents.

of grant. 64. Upon the sealing of a patent the Comptroller shall cause to be entered in the register of patents the name, address, and description of the patentee as the grantee thereof, and the title of the invention.

st for of sub- t pro- ship. 65. Where a person becomes entitled to a patent or to any share or interest therein, by assignment either throughout the United Kingdom and the Isle of Man, or for any place or places therein, or by transmission or other operation of law, a request for the entry of his name in the register as such complete or partial proprietor of the patent, or of such share or interest therein, as the case may be, shall be addressed to the Comptroller, and left at the Patent Office.

ure of t. 66. Such request shall in the case of individuals be made and signed by the person requiring to be registered as proprietor, or by his agent duly authorised to the satisfaction of the Comptroller, and in the case of a body corporate by their agent, authorised in like manner.

ulars to ed in 67. Every such request shall state the name, address, and description of the person claiming to be entitled to the patent, or to any share or interest therein, as the case may be (hereinafter called the claimant), and the particulars of the assignment, transmission, or other operation of law, by virtue of which he requires to be entered in the register as proprietor, so as to show the manner in which, and the person or persons to whom, the patent, or such share or interest therein as aforesaid, has been assigned or transmitted.

tion of nts of id other 68. Every assignment and every other document containing, giving effect to, or being evidence of, the transmission of a patent or affecting the proprietorship thereof as claimed by such request, except such documents as are matters of record, shall be produced to the Comptroller, together with the request above prescribed, and such other proof of title as he may require for his satisfaction.

As to a document which is a matter of record, an official or certified copy thereof shall in like manner be produced to the Comptroller.

Copies for Patent Office.

69. There shall also be left with the request an examined copy of the assignment or other document above required to be produced.

As to a document which is a matter of record, an official or certified copy shall be left with the request in lieu of an examined copy.

Body corporate.

70. A body corporate may be registered as proprietor by its corporate name.

Entry of Orders of the Privy Council or of the Court.

71. Where an order has been made by her Majesty in Council for the extension of a patent for a further term or for the grant of a new patent, or where an order has been made by the Court for the revocation of a patent or the rectification of the register under section 90 of the said Act, or otherwise affecting the validity or proprietorship of the patent, the person in whose favour such order has been made shall forthwith leave at the Patent Office an office copy of such order. The register shall thereupon be rectified, or the purport of such order shall otherwise be duly entered in the register, as the case may be.

Entry of payment of fees on issue of certificate.

72. Upon the issue of a certificate of payment under Rule 45, the comptroller shall cause to be entered in the Register of Patents a record of the amount and date of payment of the fee on such certificate.

Entry of failure to pay fees.

73. If a patentee fails to make any prescribed payment within the prescribed time, or any enlargement thereof duly granted, such failure shall be duly entered in the register.

Entry of licences.

74. An examined copy of every licence granted under a patent shall be left at the Patent Office by the licensee, with a request that a notification thereof may be entered in the register. The licensee shall cause the accuracy of such copy to be certified as the Comptroller may direct, and the original licence shall at the same time be produced and left at the Patent Office if required for further verification.

Hours of inspection of register.

75. The register of patents shall be open to the inspection of the public on every week day between the hours of ten and four, except on the days and at the times following :—

(*a*) Christmas day, Good Friday, the day observed as her Majesty's birthday, days observed as days of public fast or thanksgiving, and days observed as holidays at the Bank of England; or

(*b*) Days which may from time to time be notified by a placard posted in a conspicuous place at the Patent Office;

(*c*) Times when the register is required for any purpose of official use;

fied copies cuments.

76. Certified copies of any entry in the register, or certified copies of, or extracts from, patents, specifications, disclaimers, affidavits, statutory declarations, and other public documents in the Patent Office, or of or from registers and other books kept there, may be furnished by the Comptroller on payment of the prescribed fee.

Power to dispense with Evidence, &c.

77. Where, under these Rules, any person is required to do any act or thing, or to sign any document, or to make any declaration on behalf of himself or of any body corporate, or any document or evidence is required to be produced to or left with the Comptroller, or at the Patent Office, and it is shown to the satisfaction of the Comptroller that from any reasonable cause such person is unable to do such act or thing, or to sign such document, or make such declaration, or that such document or evidence cannot be produced or left as aforesaid, it shall be lawful for the Comptroller, with the sanction of the Board of Trade, and upon the production of such other evidence, and subject to such terms as they may think fit, to dispense with any such act or thing, document, declaration, or evidence.

Repeal.

al.

78. All general rules made by the Lord Chancellor, or by any other authority, under the Patent Law Amendment Acts, and in force on the 31st day of December 1883, shall be and they are hereby repealed as from that date, without prejudice, nevertheless, to any application then pending.

Dated the 21st day of December 1883.

(Signed) J. CHAMBERLAIN,
President of the Board of Trade.

RULES REGULATING THE PRACTICE AND PROCEDURE ON APPEALS TO THE LAW OFFICERS.

I. When any person intends to appeal to the law officer from a decision of the Comptroller in any case in which such appeal is given by the Act, he shall within 14 days from the date of the decision appealed against file in the Patent Office a notice of such his intention.

II. Such notice shall state the nature of the decision appealed against, and whether the appeal is from the whole, or part only, and if so, what part of such decision.

III. A copy of such notice of intention to appeal shall be sent by the party so intending to appeal to the law officer's clerk at room 549, Royal Courts of Justice, London; and when there has been an opposition before the Comptroller, to the opponent or opponents; and when the Comptroller has refused to seal a patent on the ground that a previous application for a patent for the same invention is pending, to the prior applicant.

IV. Upon notice of appeal being filed, the Comptroller shall forthwith transmit to the law officer's clerk all the papers relating to the matter of the application in respect of which such appeal is made.

V. No appeal shall be entertained of which notice is not given within 14 days from the date of the decision appealed against, or such further time as the Comptroller may allow, except by special leave upon application to the law officer.

VI. Seven days' notice, at least, of the time and place appointed for the hearing of any appeal, shall be given by the law officer's clerk, unless special leave be given by the law officer that any shorter notice be given.

VII. Such notice shall in all cases be given to the Comptroller and the appellant; and, when there has been an opposition before the Comptroller, to the opponent or opponents; and when the Comptroller has refused to seal a patent on the

ground that an application for a patent for the same invention is pending, to the prior applicant.

VIII. The evidence used on appeal to the law officer shall be the same as that used at the hearing before the Comptroller; and no further evidence shall be given, save as to matters which have occurred or come to the knowledge of either party, after the date of the decision appealed against, except with the leave of the law officer upon application for that purpose.

IX. The law officer shall, at the request of either party, order the attendance at the hearing on appeal, for the purpose of being cross-examined, of any person, who has made a declaration, in the matter to which the appeal relates, unless in the opinion of the law officer, there is good ground for not making such order.

X. Any person requiring the attendance of a witness for cross-examination shall tender to the witness whose attendance is required a reasonable sum for conduct money.

XI. Where the law officer orders that costs shall be paid by any party to another, he may fix the amount of such costs, and if he shall not think fit to fix the amount thereof, he shall direct by whom and in what manner the amount of such costs shall be ascertained.

XII. If any costs so ordered to be paid be not paid within 14 days after the amount thereof has been so fixed or ascertained, or such shorter period as shall be directed by the law officer, the party to whom such costs are to be paid may apply to the law officer for an order for payment under the provisions of section 38 of the Act.

XIII. All documentary evidence required, or allowed by the law officer to be filed, shall be subject to the same regulations, in all respects, as apply to the procedure before the Comptroller, and shall be filed in the Patent Office, unless the law officer shall order to the contrary.

XIV. Any notice or other document required to be given to the law officer's clerk, under these Rules, may be sent by a prepaid letter through the post.

HENRY JAMES, A.G.
FARRER HERSCHELL, S.G.

FIRST SCHEDULE.

LIST OF FEES PAYABLE ON AND IN CONNECTION WITH LETTERS PATENT.

Up to Sealing.

	£	s.	d.	£	s.	d.
1. On application for provisional protection	1	0	0			
2. On filing complete specification . .	3	0	0			
				4	0	0
or						
3. On filing complete specification with first application				4	0	0
4. On appeal from Comptroller to law officer. By appellant				3	0	0
5. On notice of opposition to grant of patent. By opponent				0	10	0
6. On hearing by Comptroller. By applicant and by opponent respectively				1	0	0
7. On application to amend specification:— Up to sealing. By applicant				1	10	0
8. After sealing. By patentee				3	0	0
9. On notice of opposition to amendment. By opponent				0	10	0
10. On hearing by Comptroller. By applicant and by opponent respectively				1	0	0
11. On application to amend specification during action or proceeding. By patentee				3	0	0
12. On application to the Board of Trade for a compulsory licence. By person applying . .				5	0	0
13. On opposition to grant of compulsory licence. By patentee				5	0	0
14. On certificate of renewal:— Before end of 4 years from date of patent .				50	0	0
15. Before end of 7 years, or in the case of patents granted under the 'Patents, Designs, and Trade Marks Act, 1883,' before the end of 8 years from the date of patent . . .				100	0	0

		£	s.	d.
	or in lieu of the fees of 50*l.* and 100*l.*, the following annual fees:—			
16.	Before the expiration of the 4th year from the date of the patent	10	0	0
17.	„ 5th „ „	10	0	0
18.	„ 6th „ „	10	0	0
19.	„ 7th „ „	10	0	0
20.	„ 8th „ „	15	0	0
21.	„ 9th „ „	15	0	0
22.	„ 10th „ „	20	0	0
23.	„ 11th „ „	20	0	0
24.	„ 12th „ „	20	0	0
25.	„ 13th „ „	20	0	0
	On enlargement of time for payment of renewal fees:—			
26.	Not exceeding 1 month	3	0	0
27.	„ 2 months	7	0	0
28.	„ 3 months	10	0	0
29.	For every entry of an assignment, transmission, agreement, licence, or extension of patent	0	10	0
30.	For duplicate of letters patent . . . each	2	0	0
31.	On notice to Comptroller of intended exhibition of a patent under section 39	0	10	0
32.	Search or inspection fee . . . . each	0	1	0
33.	For office copies . . . every 100 words (but never less than one shilling)	0	0	4
34.	For office copies of drawings, cost according to agreement.			
35.	For certifying office copies, MSS. or printed, each	0	1	0
36.	On request to Comptroller to correct a clerical error	0	5	0
37.	For certificate of comptroller under section 96	0	5	0
38.	For altering address in register	0	5	0

(Signed) J. CHAMBERLAIN,
President of the Board of Trade.

21st December 1883.

Approved:

(Signed) CHARLES C. COTES,
HERBERT J. GLADSTONE.
Lords Commissioners of
Her Majesty's Treasury

4th December 1883.

THE SECOND SCHEDULE.

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ENT.

Form A.

APPLICATION FOR PATENT.

ere insert all additional calling cant or nts.

(a) , do solemnly and sincerely declare that in possession of an invention for (b)

ere insert inven-

that the true and first inventor thereof; and that the same is not in use by any other person or persons to the best of knowledge and belief; and humbly pray that a patent may be granted for the said invention.

And make the above solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Statutory Declarations Act, 1835.

nature of nt or nts.

(c)

declared than licant lifferent r places, fter ed' the ds 'by ve-

Declared at (d) in the
this day of 18 .
Before me,
(e)

gnature e of the before he decla- s made.

[Declared at (d) in the
this day of 18 .
Before me,
(e)

(f)]

f not re- as in note ke out thin s.

NOTE.—Where the above declaration is made out of the United Kingdom, the words 'and by virtue of the Statutory Declarations Act, 1835,' must be omitted, and the declaration must be made before a British Consular Officer, or where it is not reasonably practicable to make it before such officer, then before a public officer duly authorised in that behalf.

PATENT.

Form A1.

APPLICATION FOR PATENT FOR INVENTIONS COMMUNICATED FROM ABROAD.

I (*a*) of in the county of do solemnly and sincerely declare that I am in possession of an invention for (*b*)

which invention has been communicated to me from abroad by (*c*)

that I claim to be the true and first inventor thereof: and that the same is not in use within this realm by any other person or persons to the best of my knowledge and belief; and I humbly pray that a patent may be granted to me for the said invention.

And I make the above solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Statutory Declarations Act, 1835.

(*d*)

Declared at in the county of this day of 18 .

Before me,

(*e*)

(*a*) Here insert name, full address, and calling of applicant.

(*b*) Here insert title of invention.

(*c*) Here insert name, address, and calling of communicant.

(*d*) Signature of applicant.

(*e*) Signature and title of the officer before whom the declaration is made.

NOTE.—Where the above declaration is made out of the United Kingdom the words 'and by virtue of the Statutory Declarations Act, 1835,' must be omitted, and the declaration must be made before a British Consular Officer, or where it is not reasonably practicable to make it before such officer, then before a public officer duly authorised in that behalf.

To be issued with **Form A** *or* **A1.**

Form B.

PROVISIONAL SPECIFICATION.

(To be furnished in Duplicate.)

(*a*) Here insert title as in declaration.

(*a*)

(*b*) Here insert name, full address, and calling of applicant or applicants, as in declaration.

(*b*)

do hereby declare the nature of said invention for

(*c*) Here insert short description of invention.

to be as follows (*c*):

NOTE.—No stamp is required on this document, which must form the commencement of the Provisional Specification; the continuation to be upon wide-ruled foolscap paper (but on side only) with a margin of two inches on left hand of paper. The Provisional Specification and the 'Duplicate' thereof must be signed by the applicant or his agent on the last sheet, the date being first inserted as follows:—

'Dated this day of 18 .'

Form C.

PATENT.

COMPLETE SPECIFICATION.

(To be furnished in Duplicate—one unstamped.)

(a) Here insert title, as in declaration.

(a)

(b) Here insert name, full address, and calling of applicant or applicants, as in declaration.

(b)

do hereby declare the nature of invention for

and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement (c):—

(c) Here insert full description of invention *which must end with a distinct statement of claim or claims, in the following form:*
'Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is—
(1)
(2)
(3)
Here state distinctly the features of novelty claimed.

NOTE.—This document must form the commencement of the complete Specification; the continuation to be upon wide-ruled foolscap paper (but on one side only) with a margin of two inches on left hand of paper. The complete Specification and the 'Duplicate' thereof must be signed by the applicant or his agent on the last sheet, the date being first inserted as follows:—

'Dated this day of 18 .'

TENT.

re insert nd full

re state hich of unds of ion per- by section ie Act the s opposed.

e insert re of op- or agent.

Form D.

FORM OF OPPOSITION TO GRANT OF PATENT.

[*To be accompanied by an unstamped copy.*]

I*

hereby give notice of my intention to oppose the grant of Letters Patent upon application No. of , applied for by

upon the ground †

(Signed) ‡

To the Comptroller,
Patent Office, 25, Southampton Buildings,
Chancery Lane, London, W.C.

Form E.

FORM OF APPLICATION FOR HEARING BY THE COMPTROLLER.

IN CASES OF REFUSAL TO ACCEPT, OPPOSITION, OR APPLICATIONS FOR AMENDMENTS, ETC.

ENT.

ere insert ress.

Sir,

of (*a*)

hereby apply to be heard in reference to

and request that I may receive due notice of the day fixed for the hearing.

Sir,
Your obedient Servant,

To the Comptroller,
Patent Office, 25, Southampton Buildings,
Chancery Lane, London, W.C.

PATENT.

Form F.

FORM OF APPLICATION FOR AMENDMENT OF SPECIFICATION OR DRAWINGS.

* Here state name and full address of applicant or patentee.

*

seek leave to amend the specification of Letters Patent No. of 188 , as shown in red ink in the copy of the original specification hereunto annexed.

† Here state reasons for seeking amendment; and where the applicant is not the patentee, state what interest he possesses in the letters patent.

My reasons for making this amendment are as follows: †

(Signed)

To the Comptroller,
Patent Office, 25, Southampton Buildings,
Chancery Lane, London, W.C.

PATENT.

Form G.

FORM OF OPPOSITION TO AMENDMENT OF SPECIFICATION OR DRAWINGS.

[*To be accompanied by an unstamped copy.*]

* Here state name and full address of opponent.

*

hereby give notice of objection to the proposed amendment of the specification or drawings of Letters Patent No. of 188 for the following reason: †

† Here state reason of opposition.

(Signed)

To the Comptroller,
Patent Office, 25, Southampton Buildings,
Chancery Lane, London, W.C.

PATENT.

Form H.

FORM OF APPLICATION FOR COMPULSORY GRANT OF LICENCE.

[*To be accompanied by an unstamped copy.*]

* Here state name and full address of applicant.

*

hereby request you to bring to the notice of the Board of Trade the accompanying petition for the grant of a licence to me by †

† Here state name and address of patentee, and number and date of his patent.

(Signed)

NOTE.—The petition must clearly set forth the facts of the case, and be accompanied by an examined copy thereof. (*See* Form, next page.)

To the Comptroller,
Patent Office, 25 Southampton Buildings,
Chancery Lane, London, W.C.

Form H1.

FORM OF PETITION FOR COMPULSORY GRANT OF LICENCES.

To the Lords of the Committee of Privy Council for Trade.

THE PETITION of (*a*) of in the county of , being a person interested in the matter of this petition as hereinafter described :—

SHEWETH as follows:—

1. A patent dated No. was duly granted to for an invention of (*b*)

2. The nature of my interest in the matter of this petition is as follows :—(*c*)

3. (*d*)

Having regard to the circumstances above stated, the petitioner alleges that by reason of the aforesaid default of the patentee to grant licences on reasonable terms (*e*)

Your petitioner therefore prays that an order may be made by the Board of Trade (*f*)

or that the petitioner may have such other relief in the premises as the Board of Trade may deem just.

(*a*) Here insert name, full address, and description.

(*b*) Here insert title of invention.

(*c*) Here state fully the nature of petitioner's interest.

(*d*) Here state in detail the circumstances of the case under section 22 of the said Act, and show that it arises by reason of the default of the patentee to grant licences on reasonable terms. The statement of the case should also show as far as possible that the terms of the proposed order are just and reasonable. The paragraphs should be numbered consecutively.

(*e*) Here state the ground or grounds on which relief is claimed in the language of section 22, subsection (*a*), (*b*), or (*c*), as the case may be.

(*f*) Here state the purport and effect of the proposed order, and the terms as to the amount of royalties, security for payment, or otherwise, upon which the petitioner claims to be entitled to the relief in question.

PATENT.

Form I.

FORM OF OPPOSITION TO COMPULSORY GRANT OF LICENCE.

* Here state name and full address.

*

hereby give notice of objection to the application of

for the compulsory grant of a licence under Patent No.

of 188 .

(Signed)

To the Comptroller,
Patent Office, 25 Southampton Buildings,
Chancery Lane, London, W.C.

Form J.

APPLICATION FOR CERTIFICATE OF PAYMENT OR RENEWAL.

hereby transmit the fee prescribed for the continuation in force of Patent No. , of 18 for a further period of .

Name *

Address

* Here insert name and full address of patentee or his agent.

To the Comptroller,
Patent Office, 25 Southampton Buildings,
Chancery Lane, London, W.C.

PATENT.

CERTIFICATE OF PAYMENT OR RENEWAL.

Letters Patent No. of 18 .

18 .

This is to certify that did this day of 18 , make the prescribed payment of £ in respect of a period of from and that by virtue of such payment the rights of remain in force.*

* See section 17 of the Patents, Designs, and Trade Marks Act, 1883.

Seal.

Patent Office, London.

TENT.

Form K.

FORM OF APPLICATION FOR ENLARGEMENT OF TIME FOR PAYMENT OF RENEWAL FEE.

SIR,

I HEREBY apply for an enlargement of time for month in which to make the payment of £ upon my Patent, No. , of 188 .

I am,
Sir,
Your obedient Servant

lere insert (a)
ress to
receipt is
ent.

To the Comptroller,
Patent Office, 25 Southampton Buildings,
Chancery Lane, London, W.C.

PATENT.

Form L.

FORM OF REQUEST TO ENTER NAME UPON THE REGISTER OF PATENTS, AND OF DECLARATIONS IN SUPPORT THEREOF.

I (*a*),

(*a*) *Or* We. Here insert name, full address, and description.

hereby request that you will enter (*b*) name (*c*) in the Register of Patents:—

(*b*) My *or* our.
(*c*) *Or* names.

(*d*) claim to be entitled (*e*)

(*d*) I *or* we.
(*e*) Here insert the nature of the claim.

of the Patent No. of 188 , granted to (*f*)

(*f*) Here give name and address, &c., of Patentee or Patentees.

for (*g*)

(*g*) Here insert title of the invention.

by virtue of (*h*)

(*h*) Here specify the particulars of such document, giving its date, and the parties to the same, and showing how the claim here made is substantiated.

And in proof whereof I transmit the accompanying (*i*) with an examined copy thereof (*j*)

(*i*) Here insert the nature of the document.

(*j*) Where any document which is a matter of record is required to be left, a certified or official copy in lieu of an examined copy must be left.

I am,
Sir,
Your obedient Servant,

To the Comptroller,
Patent Office, 25 Southampton Buildings,
Chancery Lane, London, W.C.

PATENT.

Form M.

FORM OF REQUEST TO ENTER NOTIFICATION OF LICENCE IN THE REGISTER OF PATENTS.

SIR,

I HEREBY transmit an examined copy of a licence granted to me by
under Patent No. of 188 , as well as the original licence for verification, and I have to request that a notification thereof may be entered in the Register.

I am,
Sir,
Your obedient Servant,

(a)

(a) Here insert full address.

To the Comptroller,
Patent Office, 25 Southampton Buildings,
Chancery Lane, London, W.C.

PATENT.

Form N.

APPLICATION FOR DUPLICATE OF PATENT.

Date

SIR,

I REGRET to have to inform you that the Letters Patent, dated * No.
granted to

for an invention of †

have been ‡

I beg therefore to apply for the issue of a duplicate of such Letters Patent.§

[Signature of Applicant.]

[* Here insert date, No., name, and full address of Patentee.]

[† Here insert title of invention.]

[‡ Here insert the word 'destroyed' or 'lost,' as the case may be.]

§ Here state interest possessed by applicant in the Letters Patent.

To the Comptroller,
Patent Office, 25 Southampton Buildings,
Chancery Lane, London, W.C.

PATENT.

Form O.

NOTICE OF INTENDED EXHIBITION OF AN UNPATENTED INVENTION.

* Here state name and full address of applicant.

* hereby give notice of my intention to exhibit a of at the Exhibition, which † ot 18 , under the provisions of the Patents, Designs, and Trade Marks Act of 1883.

† State 'opened' or 'is to open.'

‡ Insert brief description of invention, with drawings if necessary.

‡ herewith enclose

(Signed)

To the Comptroller,
Patent Office, 25 Southampton Buildings,
Chancery Lane, London, W.C.

PATENT.

Form P.

FORM OF REQUEST FOR CORRECTION OF CLERICAL ERROR.

SIR,

I HEREBY request that the following clerical error (*a*) may be corrected in (*b*)

(*a*) *or* errors.

(*b*) Here state whether in application, specification, or register.

Signature
Full Address

To the Comptroller,
Patent Office, 25 Southampton Buildings,
Chancery Lane, London, W.C.

PATENT.

Form Q.

CERTIFICATE OF COMPTROLLER-GENERAL.

Patent Office,
London,
188 .

I, , Comptroller-General of Patents, Designs, and Trade Marks, hereby certify

---

PATENT.

Form R.

FORM OF NOTICE FOR ALTERATION OF AN ADDRESS IN REGISTER.

SIR,

(a)

(a) Here state name or names and full address of applicant or applicants.

hereby request that address now upon the Register may be altered as follows:—

(b)

(b) Here insert full address.

Sir,
Your obedient Servant,

To the Comptroller,
Patent Office, 25, Southampton Buildings,
Chancery Lane, London, W.C.

PATENT.

Form S.

FORM OF APPLICATION FOR ENTRY OF ORDER OF PRIVY COUNCIL IN REGISTER.

(*a*)

hereby transmit an office copy of an Order in Council with reference to (*b*)

Sir,
Your obedient Servant,

To the Comptroller,
Patent Office, 25, Southampton Buildings,
Chancery Lane, London, W.C.

(*a*) Here state name and full address of applicant.

(*b*) Here state the purport of the order.

PATENT.

Form T.

FORM OF APPEAL TO LAW OFFICER.

I, (*a*) of (*a*)
hereby give notice of my intention to appeal to the Law Officer from (*b*)
of the Comptroller of the day of
188 , whereby he (*c*)
No. (*d*) of the year 188 (*d*)

Signature
Date

N.B.—This notice has to be sent to the Comptroller-General at the Patent Office, London, W.C., and a copy of same to the Law Officers' Clerk at Room 549, Royal Courts of Justice, London.

21st December 1883.

(Signed) J. CHAMBERLAIN,
President of the Board of Trade.

(*a*) Here insert name and full address of appellant.

(*b*) Here insert 'the decision' or 'that part of the decision,' as the case may be.

(*c*) Here insert 'refused [or allowed] application for Patent,' or 'refused [or allowed] application for leave to amend Patent,' or otherwise, as the case may be.

(*d*) Insert number and year.

PRIVY COUNCIL.

RULES IN PATENT CASES BEFORE THE JUDICIAL COMMITTEE.

RULES TO BE OBSERVED IN PROCEEDINGS BEFORE THE JUDICIAL COMMITTEE OF THE PRIVY COUNCIL UNDER THE ACT OF THE 5TH & 6TH WM. IV.[1]

Rule I.—Relates to proceedings for the confirmation of patents under the second section of the repealed Statute, which has not been reenacted.

Rule II.—A party intending to apply by petition, under section 4 of the said Act (sect. 25 of Patents Act, 1883) shall, in the advertisements directed to be published by the said section, give notice of the day on which he intends to apply for a time to be fixed for hearing the matter of his petition (which day shall not be less than four weeks from the date of the publication of the last of the advertisements to be inserted in the 'London Gazette'), and that on or before such day caveats must be entered; and any person intending to enter a caveat shall enter the same at the Council Office, on or before such day so named in the said advertisements; and having entered such caveat, shall be entitled to have from the petitioner four weeks' notice of the time appointed for the hearing.[2]

[1] Although this Act is repealed, these Rules are continued in force by the sixth subsection of the twenty-fifth section of the Patent Act of 1883, until her Majesty in Council shall be pleased to issue new rules.

[2] The fourth section of the 5 and 6 Wm. IV. c. 83 required the applicant to advertise his intention to apply for a prolongation three times in the London Gazette and in three London papers and three times in some country paper published in the town where or near to which he carried on any manufacture of anything made accord-

Rule III.—Petitions under section 4 of the said Act (sect. 25 of Patents Act, 1883) must be presented within one week from the insertion of the last of the advertisements required to be published in the 'London Gazette.'

Rule IV.—All petitions must be accompanied with affidavits of advertisements having been inserted according to the provisions of section 4 of the said Act (sect. 25 subs. 1 of Patents Act, 1883) and the 1st and 2nd of these Rules, and the matters in such affidavits may be disputed by the parties opposing upon the hearing of the petitions.

Rule V.—All persons entering caveats under section 4 of the said Act (sect. 25 subs. 2 of Patents Act, 1883) and all parties to any former suit or action touching letters patent, in respect of which petitions shall have been presented under section 2 of the said Act, and all persons lodging notices of opposition under the 1st of these Rules, shall respectively be entitled to be served with copies of petitions presented under the said sections, and no application to fix a time for hearing shall be made without affidavit of such service.

Rule VI.—All parties served with petitions shall lodge at the Council Office, within a fortnight after such service, notice of the grounds of their objections to the granting of the prayers of such petitions.

Rule VII.—Parties may have copies of all papers lodged in respect of any application under the said Act, at their own expense.

Rule VIII.—The Registrar of the Privy Council, or other officer to whom it may be referred to tax the costs incurred in the matter of any petition presented under the said Act, shall allow or disallow, in his discretion, all payments made to persons of science or skill examined as witnesses to matters of opinion chiefly.

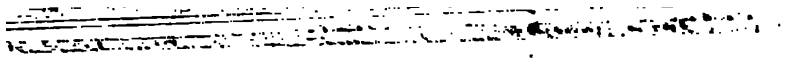
ing to his specification, or near to or in which he resided in case he carried on no such manufacture, or published in the county where he carried on such manufacture or where he lived in case there should not be any paper published in such town.

In *Derosne's Patent* (4 Moo. P. C. 416 *S. C.* 2 W. P. C. 2) it was held that when the petitioner resided abroad and had no manufactory in England, he would sufficiently comply with these directions if he inserted advertisements in the newspapers published in the towns or cou ty where his licensees were resident.

Rule IX.—A party applying for an extension of a patent, under section 4 of the said Act (sect. 25 of Patents Act, 1883) must lodge at the Council Office six printed copies of the specification, and also four copies of the balance-sheet of expenditure and receipts relating to the patent in question, which accounts are to be proved on oath before the Lords of the Committee at the hearing. In the event of the applicant's specification not having been printed, and if the expense of making six copies of any drawing therein contained or referred to would be considerable, the lodging of two copies only of such specification and drawing will be deemed sufficient.

All copies mentioned in this Rule must be lodged not less than one week before the day fixed for hearing the application.

The Judicial Committee will hear the Attorney-General, or other Counsel, on behalf of the Crown, against granting any application made under either the second or fourth section of the said Act (sect. 25 of Patents Act, 1883) in case it shall be thought fit to oppose the same on such behalf.



APPENDIX.

PART II.

PATENT LAWS OF FOREIGN COUNTRIES.

AMERICA, U.S. OF.
ARGENTINE REPUBLIC.
AUSTRIA.
BELGIUM.
BRAZIL.
CHILI.
COLOMBIA.
DENMARK.
FINLAND.
FRANCE.
GERMANY.
GUATEMALA.
HOLLAND.
ITALY.
JAPAN.
LUXEMBURG.
MEXICO.
NICARAGUA.
NORWAY.
PARAGUAY.
PORTUGAL.
RUSSIA AND FINLAND.
SAN SALVADOR.
SPAIN.
SWEDEN.
SWITZERLAND.
TURKEY.
VENEZUELA.

PATENT LAWS OF BRITISH COLONIES.

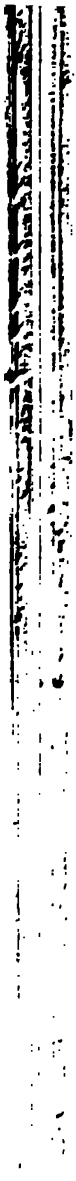
AUSTRALIAN COLONIES.

NEW SOUTH WALES.
NEW ZEALAND.
QUEENSLAND.
SOUTH AUSTRALIA.
TASMANIA.
VICTORIA.
WESTERN AUSTRALIA.

BRITISH GUIANA.
BRITISH HONDURAS.
CANADA.
CAPE OF GOOD HOPE.
CEYLON.
HONGKONG.
INDIA.
JAMAICA.
LEEWARD ISLANDS
MAURITIUS.
NATAL.
NEWFOUNDLAND.
ST. HELENA.
STRAITS SETTLEMENTS.
TRINIDAD.

PART III.

INTERNATIONAL CONVENTION



PART II.

FOREIGN PATENTS.

THE field for enterprise in this respect is so large, that it behoves the inventor, who is not satisfied with the protection afforded him at home, to consider well the countries in which his invention is likely to come into use, and also his own personal prospects of pushing his invention abroad.

It is well known that a very large sum of money is annually spent upon foreign patents without the slightest return; and this arises, not so much from the fact that the inventions patented abroad are not of value or suited to the requirements of the countries in which they are patented, but that the inventors having once obtained patents, do not attend to the requirements of the several states as to the acts to be done and duties paid, and do not take the trouble to obtain a commercial introduction of their inventions, but seem to think, contrary to general experience, that nothing more than the possession of the patent is requisite for the purpose of obtaining a return for the invention.

There are many rules with respect to foreign patents which differ from our British regulations: for instance, it is nearly universally necessary that the inventor should himself apply for the patent, and that the inventions patented should be put into practice within a certain definite period from the grant, and should continue in use year by year during the term. Annual and other duties have to be paid, and in some states the patented articles must be made in the country itself, and cannot be imported. It should also be borne in mind that in many foreign states publication at home is a bar to obtaining a patent afterwards; also that the patent

for an imported invention expires with the determination of the grant in that country from which the invention has been imported.

The recent International Convention on patents is printed on page 462 of this appendix, and it will be found to make the following important alterations as to patents taken out by subjects of the several States who are parties to it. First, that the subjects of the several States enjoy in all other States the advantages that their respective laws grant to them as subjects. Second, any person who has registered an application for a patent in any one of the States enjoys a right of priority protecting the first patentee against any acts accomplished in the interval, for a term of six months, a month longer being allowed for countries beyond the sea. Third, the introduction by the patentee into the country where the patent has been granted of objects manufactured in any of the other States does not entail forfeiture, but the patentee must work his patent in conformity with the laws of the country into which he introduces the patented object. Fourth, the several States agree to grant temporary protection to patentable inventions for articles appearing at officially recognised International Exhibitions.

The following summaries of Foreign Patent Laws have been carefully revised by patent agents and lawyers practising in the respective States.

UNITED STATES OF AMERICA.

The existing laws of patents in the United States, comprising various Acts of Congress passed from time to time, have been collected and embodied in the Revised Statutes, approved June 4, 1874. There is now no difference in fees paid by citizens and foreigners.

Probably in no country in the world are the rights of inventors more cherished than in the United States, and the number of patents issued there annually far exceeds that granted in any other country.

The facilities for obtaining patents have been largely increased of late years, and no application for an invention

possessing any features of novelty and utility is refused, if perseveringly and skilfully prosecuted.

The following particulars will be found, we believe, to give all the information an inventor can require as to the patent laws in the United States:—

Every original and first inventor, whether native or foreign, may obtain a patent for his invention, provided only it has not been in public use or on sale in the United States for more than two years previously to his application. The application must be in the name of and executed by, the inventor himself, and must be confined strictly to a single invention.

Patentable invention includes new and useful arts, new machines and implements, new chemical compounds, and new manufactures, but mere applications involving no new results cannot be patented.

By executing and recording in the Patent Office an assignment, the patent may be issued to an assignee.

The petition to the Commissioner of Patents must be accompanied by the first fee of 15 dollars, a specification fully explaining the nature of the invention and the best mode contemplated of carrying the same into effect; drawings, if the invention be susceptible of such illustration, and on oath in the prescribed form. The requirement of a model is now practically abolished, being only insisted on in cases where, by reason of its complicated nature, the invention cannot be understood without such aid.

The prosecution of cases before the United States Patent Office is conducted under a complex system of rules, constantly revised by the Secretary of the Interior and Commissioner of Patents, which renders such prosecution difficult and uncertain, and requires the exercise of great care and skill on the part of applicants and their attorneys.

In the order of their filing applications are taken up for examination by one of a corps of twenty-five skilled examiners, each of whom has under him four assistants and a number of clerks. Precedence is given to applications for inventions that have been patented abroad.

A thorough investigation is then conducted to ascertain

the novelty of the invention claimed, the search extending through domestic and foreign patents, and the scientific and industrial publications of different countries bearing on the invention under examination.

If the invention is found to be wholly or partly wanting in novelty, or if the application includes more than one invention, or if any formal defects are discovered, the application is rejected, the reasons therefor being clearly pointed out.

The application may be again presented, either with or without amendment, and a reconsideration obtained. If the applicant is dissatisfied with the final action of the examiner he may appeal upon the points of disagreement to the Board of Examiners-in-Chief. From their decision appeal lies to the Commissioner of Patents in person, and from his to the supreme court of the district of Columbia. For such appeals additional fees are required.

It often happens that two or more applicants before the Patent Office claim the same invention, or that an applicant claims to be the prior inventor of a thing already patented to another. In such case the commissioner declares an interference, which is a proceeding (somewhat analogous to a suit in chancery) to determine which of the rival claimants is in law the prior inventor of the thing in dispute. This question is determined, from proofs taken in writing, in the first instance by the Examiner of Interferences. Appeals may be taken the same as in uncontested cases, except that no appeal lies to the supreme court of the district.

Provision is made by law for the reissue of a patent in case of an insufficient or defective specification, or where the patentee has claimed more than is new. Owing to abuse of this privilege, whereby patents have been unduly expanded and made to cover different inventions from that originally patented, the courts have of late years been very severe in dealing with reissued patents, invariably declaring invalid all those that appear to have been unwarrantably broadened in scope. For this reason reissues are now looked upon with distrust and disfavour, and it becomes of great importance to the inventor that his patent should be taken out in the first

instance in such shape as to fully protect the invention, thus avoiding the necessity of a reissue.

The protection afforded by caveats is now generally regarded as of little importance, and is seldom sought. The protection was practically only open to citizens.

All patents are issued for a term of seventeen years, unless the invention has been previously patented abroad, in which case the patent is limited to expire with the foreign patent, or if there be more than one, with that having the shortest term. Under this provision an inventor suffers great disadvantage by delaying his United States application. The practice prevails in America, when an invention is to be patented in several countries, to first file the United States application and prosecute it to allowance. The day for issue of the patent can then be definitely fixed, and the patents in other countries are so obtained as to bear the same date with the United States patent. By this simultaneous issue the inventor may enjoy the full term of all his patents. This course of proceeding is not, however, possible in the case of foreign inventors where the inventor naturally applies for the home patent as being of most consequence to him in the first instance.

Upon allowance of a patent the final fee of 20 dollars must be paid.

Applications not prosecuted for two years become abandoned.

No prolongations of patents can be obtained except by special Act of Congress. Improvements upon the original invention must be protected by new patents.

After issue of the patent there are no further taxes required, and no conditions imposed upon the inventor as to working of his invention, &c.

As the novelty of a patented invention has been established by the Commissioner of Patents after a searching investigation, the presumption of law is that the patent is valid, and the courts will so construe it as to sustain it if possible.

Patents will, however, be declared void—

1. If the specification was made misleading for the purpose of deceiving the public.

2. If the thing patented were really the invention of another than the patentee.

3. If the invention had been patented or described in a printed publication before the invention of the patentee.

4. If the invention had been in public use or on sale in the United States for more than two years previously to the filing of the application.

ARGENTINE REPUBLIC.

This republic has established a Patent Office on the model of that of the United States, by a law dated October 11, 1864.

Patents are granted for terms of five, ten, or fifteen years for all new and useful inventions and discoveries excepting pharmaceutical compositions, providing that such inventions or discoveries have not been previously published.

The Government fees on a patent are 80, 200, or 350 piastres (*pesos fuertes*), according to its term (in addition to sundry petty stamp duties), one-half of which amount has to be paid at the time of the application, and the remainder by yearly payments for which the inventor must give a guarantee.

Certificates of addition or improvement are also granted both to the original patentee and to others. In the former case one-fourth of the fees required for an original patent have to be paid, and in the latter case one-half of the said fees.

Provisional patents are also granted for one year, the payment for which is 50 piastres. These patents are renewable at the expiration of each year.

Applications for patents are to refer to a single chief object with its accessories and applications.

Patents may be assigned. A patent is invalid if the drawing or specification is incorrect or incomplete. It also becomes void if not worked within two years from the date of issue, or if the working has been interrupted for a similar period, except by circumstances beyond control or accident. In either case no special judicial decree is required to render the patent null and void.

Proceedings may be taken for infringement.

Austria.

The patent law of this empire was remodelled by an imperial decree, dated August 15, 1852, which established the following regulations throughout the empire:—

Patents are not allowed for alimentary preparations, beverages, and medicines, nor for discoveries, inventions, or improvements which are contrary to public health, public welfare, morality, or the interest of the state. Scientific principles or purely scientific theories cannot be patented. With these exceptions, patents are granted for every new discovery, invention, or improvement, having for its object (*a*) a new industrial product, (*b*) a new means of producing, or (*c*) a new method of producing—that is to say, new within the empire.

An invention is deemed new when, up to the moment the patent was applied for, the same had not been put into operation, or been made public in the empire.

Foreigners, as well as Austrian subjects, may be patentees; but with regard to inventions made by foreigners not resident in Austria, patents are only granted when a patent has been obtained in a foreign country for the same object, and then only to the original patentee, or his legal assignee, during the term of his foreign patent.

Two or more inventions cannot be included in a single patent, unless they refer to the same subject-matter, as essential parts of it.

The petition for a patent may be made either by the inventor, if he is a resident of the empire, or by his legal attorney. Foreigners not residing must have a legal attorney. It must state the exact title of the invention, and the number of years for which it is desired the patent should last. The maximum duration of a patent is fifteen years, which length of time cannot be exceeded except by special imperial authority.

The amount of Government tax is as follows:—For the first five years, 26¼ florins a year; sixth year, 40 florins; seventh year, 46 florins; eighth year, 52½ florins; ninth year, 60 florins; tenth year, 66 florins; eleventh year, 79 florins;

twelfth year, 92 florins; thirteenth year, 105 florins; fourteenth year, 119 florins; fifteenth year, 132 florins; or for the entire fifteen years 918 florins (92*l.*). In addition to these taxes there are also stamps upon petitions upon each sheet of the specification, drawings, &c., payable upon patents. Previously to, or at the time of lodging the petition, the tax must be paid for the entire number of years for which the patent is applied for.

A description must accompany the petition, and this must contain a full, clear, and minute explanation of the invention and claims, so as to enable all competent persons to manufacture the article according to that specification; if drawings, samples, or models are required for the full comprehension of the description, they must be supplied.

A patentee is entitled to establish workshops or factories, to employ the workpeople he may find requisite to carry out the object of the patent to its fullest extent, and consequently to form establishments, stores, and warehouses for the manufacture, within the entire empire, under the existing legal prescriptions. He may sell and dispose of the proceeds, and license others to use his invention, take partners, and dispose of his patent right by assignment or in any way whatsoever.

When the original term of a patent is less than fifteen years, the patentee may apply to have it prolonged for one or more years within the full period of fifteen years. He must make application before the term originally limited has expired, pay the entire tax for the term of prolongation, and deposit the original letters patent and the receipt of the corresponding paid annuities of his foreign patent if the applicant is a foreigner.

A patent will be cancelled on proof that the legal requisites for a patent do not exist, or that the description does not fulfil the prescribed conditions, or that the invention is not new, or being an importation from abroad, that the patentee is not the real owner of the foreign patent, or that the object of the patent is contrary to law, or to the health or morality of the public, or the interest of the state.

A patent will expire not only by efflux of the term, but also in case the patentee has not begun to work his invention

in the empire with inland materials, within a year from the date of the patent, or in case he should entirely suspend working the same for the space of two years. Patents are invalidated if it is proved (*a*) that the description of the patent is insufficient; (*b*) that the patented invention, before the date of the official certificate, was not novel in the empire, or that the invention had been imported and that the Austrian patent has not been granted to the original proprietor of the foreign patent or to his legal assignee; (*c*) if the proprietor of a valid patent proves that the invention patented at a later period is identical with his own discovery or invention previously patented.

Belgium.

An Act bearing date May 24, 1854, and a royal decree of the same date, and an amending law of March 27, 1857, determine the law of patents in this kingdom. The International Convention includes this country.

Patents are granted without previous examination, at the sole risk of the applicants.

The duration of patents is fixed at twenty years, except in the case of inventions previously patented in some other country, where the Belgian patent expires with the foreign patent of the greatest length.

Patents are subject to an annual and progressive tax, viz.:—first year, 10 frs. (8*s*.); second year, 20 frs. (16*s*.): third year, 30 frs. (24*s*.); and so on till the twentieth year, when the tax will be 200 frs. (8*l*.). Each annual tax is to be paid in advance.

No tax is payable on patents for improvement when delivered to the original patentee; such patents expire with the original patent.

Patents confer on their owners or assigns the exclusive right of working the invention for themselves, or having it worked by persons authorised by them.

Applicants for patents are required to lodge at the proper office, in duplicate, a full description of the invention, with drawings, models, or samples, when necessary. The first annual tax is paid when the documents are lodged.

Specifications of patents are published three months after the grant. The annnal tax can be paid within one month after the date when it is due without fine, and can be paid within five months after the expiration of the one month, on payment of 10 frs. besides the annual tax.

The owner of a patent must work the invention in Belgium within one year from its having been worked abroad; otherwise the government will, on presentation of a petition to that effect, declare the patent to be void, and this will be the case if a suspension of the working of the invention for one year takes place, unless good reason can be given.

Patents will become void if the invention is destitute of novelty, either by reason of having been previously worked in Belgium or of having been published in a printed work; if the specification is not full and complete; also in case the invention has been previously patented in Belgium or abroad, the patentee not being the proprietor of the foreign patent.

BRAZIL.

The law No. 3129 of 1882 regulates the granting of patents in Brazil. This State is also a party to the International Convention. Patents are granted in Brazil for the term of fifteen years, and patents of addition are also granted expiring with the original patent. Foreigners having obtained patents abroad must apply for their patents in Brazil within seven months from the date of their foreign patent, and are not then prejudiced by any other application, or by the publication of the invention in Brazil in the meantime.

Inventors can also publicly exhibit their inventions in Brazil prior to their applications for patents, on obtaining the necessary permission for the purpose. An inventor desiring to obtain a patent in Brazil must deposit in duplicate a specification in Portuguese, together with drawings of the invention. The application must be limited to one invention only; if the invention has for its object chemical, pharmaceutical, or alimentary products, the Government will order an examination of samples; but if it involves none of these things the patent will issue as of course.

The patent will continue valid so long as the previous foreign patent remains in force on payment of a duty of 1*l.* for the first year, 2*l.* for the second year, 3*l.* for the third, and so on, increasing 1*l.* yearly. All assignments must be registered in the Government Office. The patent will become void if the invention is not carried into operation within three years from the grant, or if the working is thereafter interrupted for more than a year, if the annuities are not duly paid, if the patentee residing out of the country has no representative in Brazil, and upon the expiration of an earlier foreign patent for the same invention.

Legal proceedings can be taken for infringements, and the patentee can recover damages.

Under this law patents are obtained in Brazil without difficulty.

CHILI.

Article 152 of the Chilian Constitution, dated May 1833, accords to every author or inventor the exclusive proprietorship of his discovery or invention for a limited period to be fixed by law.

The conditions under which such privileges are granted, and the duration of the same, are regulated by a law passed in 1840, supplemented by other laws decreed and promulgated in August 1851, and on August 16th, 1856.

The inventor of a new invention or discovery may submit the same to the Home Minister, who will refer the application to Commissioners for examination, and if their report be favourable, the Minister will grant a patent.

The term of a patent cannot exceed ten years. The patentee has to pay a sum of 10*l.* into the Treasury. The specification, &c., is kept secret until the expiration of the term.

Patents are also granted under similar conditions for the introduction into Chili of foreign arts and industries, but in this case the term does not exceed eight years.

Patents may be extended when the importance of the invention justifies it, but application must be made therefor six months before the expiration of the first term.

A period exclusive of the term of the patent is allowed for the erection of machinery, &c., for working the patent, but should the inventor fail to carry out the same within that period, or discontinue the working for more than a year, or produce articles inferior to the original sample, the patent becomes void.

Patents may be assigned. Infringers of a patented article are liable to a fine and to the forfeiture of the article produced, and the establishment and implements used in its manufacture. Any person not being the true inventor fraudulently obtaining a patent is liable to fine or imprisonment.

COLOMBIA.

The power to grant patents in Colombia is limited and defined by the law of May 13, 1867.

A patent may be obtained for any invention or improvement of mechanical apparatus, combination of materials or process, and for the making and sale of any manufacture or industrial product, but not for the importation of foreign productions whether natural or manufactured.

The duration of a patent cannot exceed twenty nor be less than five years, and in the case of an invention previously patented abroad, such duration is subject to the earlier expiration of the prior foreign patent.

The inventor is required to present a petition to the executive power setting forth the nature of his invention or improvement, and stating the number of years for which a patent is desired; and if the decision be favourable, he must furnish within forty days a full description of the invention, accompanied by drawings or models if necessary. A patent will then be issued without any previous examination as to the novelty or utility of the invention.

A patent is refused when the invention endangers public salubrity or security, or encroaches upon proprietary rights already acquired, and a grant may be subsequently revoked if it is found to violate existing rights. A patent also becomes void if during a whole year the invention is not worked, unless it be from unavoidable circumstances.

A fee of from 1*l.* to 2*l.* for every year of the duration of the patent has to be paid in full at the time of the grant. A sum of 2*l.* is required to be paid into the Treasury on presenting the petition, which sum is either computed as part payment or forfeited according as the patent is granted or refused.

An injunction may be obtained for infringement.

DENMARK.

Inventors, whether natives or foreigners, as well as the first importer, may obtain patents.

All inventions or improvements are patentable.

The patent dates from the day of the signature of the King to the patent.

Patents of invention and of importation are granted. Improvements can only be protected by new patents of invention.

The term of patents of invention is fixed by the Government, and cannot exceed fifteen years; that of patents of foreigners is five years.

A uniform tax of 34 kroner=60 francs is required for each application for a patent. Over and above these sums are stamp duties, the same to be paid in advance.

Prolongations are not usually granted beyond the term fixed by Government for the duration of the patent.

A slight examination of the invention is made before granting the patent.

Patents are not published, and information respecting them cannot be obtained without the intervention of the Ministry of the Interior, to whom a demand, with the special motives for the same, must be presented.

The working of the invention must be proceeded with during the first year of the patent, and continued without interruption during the whole term.

The patent does not prevent the introduction of similar products into the country, provided they have been manufactured abroad.

Assignments of patents are not authorised; they may,

however, be accomplished by the joint demand of the proprietor and of the assignee, for a new patent in the name of the latter.

The petition to the King should indicate the object of the invention.

The agent or attorney must be furnished with a power of attorney.

The patent becomes void if the invention is not new, or if it has not been worked within the given time.

FINLAND.

See under Russia.

FRANCE.

As the country nearest our own shores, and with which our intercourse is so close, it is desirable all inventors should be well informed on the subject of the French laws.

It is highly important inventors should bear in mind that prior to the International Convention, to which France is a party, French patents must have been applied for prior to the filing the complete specification in England. (See *Lister's Patent*, Newton's London Journal, August 1, 1859.)

Letters patent for inventions (*brevets d'invention*) are principally regulated in France by a law bearing date July 5, 1844, the material parts of which are as follow:—

Every new discovery or invention in any branch of industry confers upon its author, under the conditions and for the time hereafter mentioned, the exclusive right of working the same for his own benefit. Such right is constituted by the documents issued by Government denominated *brevets d'invention*.

The following cannot be patented:—(1) Pharmaceutical compounds, or medicines of any kind, these being governed by special laws and regulations, principally by a decree of August 18, 1810; (2) schemes and projects of credit and finance.

The duration of patents is fifteen years; the payment in respect of a patent for fifteen years, is 1,500 francs. This

sum is to be paid by yearly instalments of 100 francs, and the patent will expire if default is made in payment of any one instalment. The duties may all be paid up in advance when desired.

Foreigners may obtain patents in France; and persons who have patented their inventions abroad may obtain patents for them in France. In such a case the French patent will expire when the foreign patent expires.

Persons desirous of obtaining a patent apply by petition to the Minister of Agriculture and Commerce, and give a description of the discovery, invention, or application forming the subject of the proposed patent, accompanied, when needful, by drawings.

The petition must be in the French language, and restricted to a single principal object, with the necessary details and its proposed applications. It must mention the duration which the applicant desires for the patent. It must also give a title, comprehending a summary and precise designation of the subject of the invention.

No documents will be received except on production of a receipt proving payment of a sum of 100 francs (*4l.*), on account of the tax on the patent.

The patents which have been applied for in due form, are delivered out without previous examination, at the risk and peril of the applicants, and without Government guarantee, either as to the reality, the novelty, or the merit of the invention, or as to the fidelity or accuracy of the description.

The patentee, or the person entitled to the patent, has the right, during the currency of the patent, to make alterations, additions, or improvements in the invention, and the proceedings are similar to those required to be taken in applying for an original patent. The petition is subjected to a tax of twenty francs only. The certificates of addition obtained by any one person entitled under the patent accrue to the benefit of all.

A patentee who, in respect of an alteration, addition, or improvement, desires to take out a principal patent in place of a certificate of addition expiring with the original patent, must pay the tax levied on original patents.

Only the patentee, and those claiming under him, can, during a year, obtain a valid patent for an alteration, improvement, or addition to the invention forming the subject of the original patent; nevertheless, every person wishing to obtain a patent for an alteration, improvement, or addition to a discovery already patented, may, in the course of the said year, make a formal application to the Minister of Agriculture and Commerce, which is to be transmitted to him, and remains deposited under seal. At the expiration of the year the seal is broken and the patent issued; but the original patentee always has the preference in respect of alterations, improvements, and additions, for which he himself shall, during the year, have demanded a certificate of addition or a patent.

A patentee may assign the whole or part of his property under a patent. The entire or partial assignment of a patent, whether as a gift or for valuable consideration, can only be made by a notarial act, and after payment of all the instalments of the tax. No assignment is valid with respect to third parties until after registration, but it is not necessary to register a simple licence to manufacture.

The descriptions, drawings, specimens, and models of patents issued, remain deposited, until the expiration of the patents, with the Minister of Agriculture and Commerce, where they may be inspected by any one, free of charge. After their expiration patents can be inspected gratuitously at the Conservatory of Arts and Commerce.

Patents are null and of no effect in the following cases, viz. (1) if the discovery, invention, or application is not new; (2) if the discovery, invention, or application is not patentable; (3) if they refer to principles, methods, systems, discoveries, and theoretical or purely scientific conceptions, the industrial applications of which are not shown; (4) if the discovery, invention, or application is contrary to the order, safety, morals, or laws of France; (5) if the title under which the patent has been applied for, fraudulently indicates something which is not the true subject-matter of the invention; (6) if the description annexed to the patent is insufficient for carrying the invention into effect, or if it does not completely and fairly state the real methods adopted by the inventor.

No discovery is held new which, previously to the date of the deposit of the petition, has received publicity in France, or in a foreign country, sufficient to enable any one to execute it.

A patentee will be deprived of his rights under the following circumstances: (1) If he should fail to pay the annual payment before the commencement of each year of the term of the patent; (2) if he shall not put his invention or discovery into execution within two years from the date of the signature of the patent, or if he shall cease for the space of two consecutive years to work the patent—unless, in either case, he can justify his inaction; (3) and in the case of patents applied for before the International Convention came into force, if he introduced into France objects made in a foreign country similar to those protected by his own patent. This did not apply to models introduced by the patentee with the permission of the Government.

Whoever, in his trade inscriptions, advertisements, prospectuses, marks, or stamps, shall assume the title of patentee, without possessing a patent issued according to law, or after the expiration of a patent; or who, being a patentee, shall describe himself as a patentee, or refer to his patent, without adding thereto the words—'*sans garantie du gouvernement*' (without the guarantee of the Government), is liable to a penalty of from 50 to 1,000 francs. In case of a repetition of the offence the penalty may be doubled.

The patent covers all the French colonies.

GERMANY.

The law of the empire of Germany with respect to patents is regulated by an Act which was passed May 25, 1877, and came into operation July 1, 1877. By this law patents are granted for new inventions which admit of industrial use, with the exception of—(1) inventions the use of which would be incompatible with the laws or the public morals; (2) inventions relating to articles of food (for nourishment or luxuries), of medicines and of substances produced by chemical process, so far as the invention does not relate to the method of producing such articles.

An invention is not regarded as new if it has already been described in a printed publication in any country, or publicly used in Germany at the time of application for a patent.

The first applicant for a patent of invention is entitled to the grant.

The claim of the petitioner to the grant of a patent is void if the essential contents of his application have without permission been taken from the descriptions, drawings, models, implements, or arrangements of another person, or from a method of manufacture used by the same, and if such person raises opposition on that account.

The patent has no effect against a person who, at the time the patentee made his application, had already been using the invention in Germany, or who had made the necessary preparations for using the same; neither has it any effect in so far as the invention is intended to be used for the army or navy or in the interest of public welfare. In such a case the patentee is, however, entitled to an adequate compensation by the Empire or the State in whose special interest a limitation of the effect of the patent has been applied for. The amount of such compensation is fixed by a court of law in case an agreement cannot be arrived at. The patent does not affect means of conveyance coming temporarily within the empire.

Patents are granted for fifteen years, commencing with the day following the day of application. If an invention is an improvement upon an earlier invention patented by the applicant, he may apply for a supplementary patent, which expires with the original patent.

A fee of 30 marks is to be paid on the issue of the patent, and a further fee must be paid for each patent at the commencement of the second and every subsequent year, amounting in the first instance to 50 marks, and increasing by 50 marks per annum for the time of duration of the patent.

The patent expires if the patentee resigns the same, or if he fails to pay the fees within three months at the latest after they have become due.

Patents are to be annulled if it is found that the invention was not patentable according to the law, or if the essential contents of the application have, without permission, been taken from the descriptions, drawings, models, implements, or arrangements of another person, or from a method of manufacture used by another.

The patent can be revoked after the expiration of three years if the patentee fails to carry out his invention in Germany to a suitable extent, or at least to do everything that is necessary to ensure its being carried out, or if the grant of licence to others for using the invention appears to be in the interest of public welfare, but the patentee refuses to grant such licence upon an adequate compensation.

Persons not residing in the empire can only claim grants of patents in case of the appointment of a representative resident in Germany.

The granting, annulment, and revocation of patents is vested in the Patent Office, which has its seat at Berlin.

The decisions of the Patent Office are subject to appeal.

At the request of the law courts the Patent Office is bound to give opinion in all questions concerning patents.

A register is kept at the Patent Office, in which the subject-matter and the duration of granted patents will be entered, as well as the name and address of the patentees and of the representatives appointed by them on presentation of their applications. The commencement, the termination, the expiration, the decree of annulment, and the revocation of patents must be entered in this register, and simultaneously published in the 'Reichsanzeiger.'

The essential parts of specifications and drawings, so far as their inspection is permitted to the public, will be published by the Patent Office in an official paper.

The application for the grant of a patent for an invention must be made in writing to the Patent Office. For each invention a separate application is required. The application must contain the petition for the grant of a patent, and must point out in a precise manner the subject-matter which is to be patented. It must also be accompanied by

drawings or other representations, models, and samples, where necessary.[1]

A fee of 20 marks must be paid on filing the application.

When the invention is approved by the Patent Office, the subject-matter of the application will be provisionally protected in favour of the petitioner, and a notification of the same will be officially published.

If the Patent Office is of opinion that the invention cannot be considered as patentable, the application will be rejected. The applicant can, however, make one appeal from such a decision.

After expiration of eight weeks from the day of publication, the Patent Office has to decide as to granting the patent. Until that date objections against the granting can be lodged with the Patent Office. They must be made in writing and be accompanied by arguments.

Before finally deciding, the Patent Office may summon both parties to attend and be heard; it may also cause the objections to be examined by suitable persons skilled in some branch of technical science, and otherwise institute inquiries for elucidating the matter.

Against a decision by which an application is rejected, the petitioner may appeal within four weeks after its notification, and against the decision concerning the granting of the patent, the petitioner or the opponent may appeal within the same time. On filing the appeal 20 marks must be paid for the cost of the proceeding.

As soon as the granting of a patent has been decided upon, the Patent Office will cause a notice to that effect to be published, and then issue the patent.

If a patent is refused, this will also be publicly notified. Upon the refusal, the provisional protection shall be considered as not having taken effect.

No action will be taken upon applications which are not written in the German language.

The term within which an action may be brought for an

[1] In the case of applications for hand fire-arms, and for spindles for spinning-machines, models are always required; they may be demanded in other cases.

infringement of patent right, is limited to three years with regard to any single case by which such action may be supported.

The question whether damage has been caused, and to what amount, will be decided by the Court after due consideration of all circumstances.

Sentence will be passed for payment of a fine not exceeding 150 marks or imprisonment—

1. On any person placing on articles, or their packing, any designation calculated to cause the erroneous impression that such articles are protected by a patent in accordance with this law.

2. On any person who in public advertisements, on signboards, on business cards, or in similar notifications, employs a designation calculated to cause the erroneous impression that the articles thus mentioned are protected by a patent in accordance with this law.

The examination conducted by the German Patent Office is of a most unsatisfactory nature. Patents are frequently refused on most inadequate grounds, and the procedure of the office frequently entails great and unnecessary expense upon the applicant.

GUATEMALA.

A law to regulate the grant of patents for inventions in this republic was passed the 2nd of June, 1864, and this State is a party to the International Convention.

The inventor of an art, manufacture, machine, instrument, preparation of material, or any improvement in them, may attend at the Ministry of the Interior and make a clear description of the invention, accompanying it with drawings, models, &c., and swearing that it is his own new invention, and the Minister of the Interior will appoint experts to examine same, and on its originality being established a patent will be issued for a term not exceeding ten years. The Government fee payable is 50 dollars. The specification and drawings will be kept secret during the existence of the patent.

Exclusive privileges may also be obtained on similar

terms for the introduction of arts, industries, or machines unknown in Guatemala, but their duration cannot exceed eight years.

The patents contain a stipulation that the privilege is to be worked within a given time (which cannot exceed two years, but is added to the period of the grant), in default of which, or if the working when commenced is suspended for more than a year, the patent becomes void.

An infringer, as also a person who obtains a patent surreptitiously, is liable to be punished by fine or imprisonment.

HOLLAND.

Although there are at present no laws for the protection of inventions in Holland, it is believed that a patent law will shortly be passed in this State.

ITALY.

The law which governs the grants of patents for the kingdom of Italy is dated from January 31, 1864, confirming the earlier Sardinian law of October 30, 1859. Italy is a party to the International Convention.

The inventor only, whether a native or a foreigner, or his assign, can obtain a patent of invention.

Inventions are considered patentable which have for their immediate object—(1) An industrial product or result; (2) any instrument, machine, &c., or mechanical arrangement; (3) any process or method of industrial production; (4) a motor, or the industrial application of a force already known; (5) lastly, the technical application of a scientific principle in such a condition that it will produce direct industrial results.

The invention must be novel.

A new invention or industrial discovery patented abroad and not yet imported into Italy, although already published by means of such foreign patent, confers the right to the inventor, or his assign, of obtaining a patent in Italy, provided the application be made before the expiration of the foreign patent, and before the importation or use by another.

A patent of invention takes effect from the date of the application, from the last day of that one of the months of

March, June, September, and December which follows next after the date of the application.

Certificates of addition are granted annexed to the principal patent. Application for certificates of addition made during the first six months by the owner of a patent have precedence over applications made for the same invention by others; but as respects duration, has a commencement.

Certificates of reduction, or disclaimers, may be demanded by a patentee within the first six months of his patent, for the purpose of reducing the patent to one or more parts of the invention forming the object of the description annexed to the original demand; it being necessary to point out clearly the parts to be struck out of the patent.

Patents are granted for various terms from one to fifteen years, at the desire of the petitioner. A patent granted for an invention already patented in another country expires with that patent for which the longest term has been granted, but in no case exceeds the maximum limit of fifteen years.

Certificates of addition expire with the original patent to which they are attached.

Every patent is liable to two taxes: the one proportional consisting of as many times 10 francs as there are years in the term demanded ; the other (annual) consisting of 40 francs for each of the first three years of the patent, 65 francs for each of the three following years, 90 francs for the seventh, eighth, and ninth years, 115 francs for the tenth, eleventh, and twelfth years, 140 francs for each of the three last years.

A sum of 20 francs only is required for certificate of addition, to be paid in advance.

All certificates of prolongation necessitate over and above the taxes the payment of a sum of 40 francs.

Each certificate of reduction involves the payment of a tax of 40 francs.

The amount of the proportional tax for the term demanded and the first annuity is to be paid when making the application for the patent. This obligation to pay in advance the total of the proportional tax becomes burdensome if the patent should not be continued. On the other hand, each

demand for prolongation necessitates the payment of a fixed tax; and the patents demanded for more than five years have accorded to them a period of two years within which they are to be put into operation. Hence the usual practice is to demand a patent for six years. The other annuities are paid in advance the first day of each year of the term of the patent, or in advance of the last day of March, June, September, or December respectively, and are subject to triennial augmentation even in the case of prolongation of the patent. Three months' grace is allowed for the payment of the annuities, and if this period lapses the patent is forfeited. For the prolongation three months' grace is not admitted.

Patents demanded for a less term than fifteen years can be prolonged to this term. Each demand for prolongation must be accompanied by the original letters patent, or an authentic copy of same, showing the ownership of the patent, and the receipt for the taxes.

Demands for patents are subjected to no other examination than that in reference to the rules laid down by the authorities, with the exception, however, of patents for drinks and eatables, which are examined by the superior sanitary council.

The records containing the certificates of deposit, changes, additions, cancelling, or assignment of patents are published. Persons requiring extracts from such records must make the application on stamped paper; the extracts are supplied at the expense of the applicant.

The drawings and descriptions are published three months after the grant of the patent; any one can then obtain one or more copies at his own expense.

Every three months a list of the patents granted during the preceding three months is published in the official journal. Every six months the descriptions and drawings of the patents granted during the previous six months are published.

Patents granted for a term not exceeding five years must be put in operation within the first year of the term, and the working must be continued: an interruption for more than one year invalidates the patent.

Patents granted for more than five years have a period of two years allowed for working them; in both cases the owner of the patent should, in case of inaction, show the reason of neglect; but the want of funds is not recognised as a valid excuse.

Every deed of transfer or assignment of a patent is registered upon the grant of the original patent, and published in the official journal; such publication is not valid as regards a third party, excepting from the date of registration.

The application for a patent addressed to the Minister of Agriculture, Industry, and Commerce must contain—(1) The name and surname, place of birth, and residence of the applicant, and of his attorney or agent; (2) a short and precise description, in the form of a title, of the nature and object of the discovery; (3) the length of the term for which the patent is desired.

To the application should be annexed—(1) Three copies of a description of the invention in French or Italian; (2) explanatory drawings or models (also three copies); (3) a receipt proving the payment of the taxes; (4) a list of the documents; (5) power of attorney legalised by the Consul of Italy.

An Italian patent becomes void—(1) If it has reference to any of the inventions prescribed by the law; (2) if the title fraudulently sets forth another object than the true object of the invention or discovery; (3) if the description does not fully and faithfully point out the necessary means of carrying out the invention; (4) if the invention is not new or useful; (5) if the patent has formed the subject of a certificate granted to a third party for modification of an invention within the six months reserved to the author or his assigns; (6) if the tax be not paid within the three months from the date at which it is due; (7) if the patent has not been worked within the prescribed period; (8) if the patent has been granted to any other than the inventor or his agent.

JAPAN.

A law of patents was some years ago established in Japan, but it has not been acted upon, and no machinery exists for the grant of patents in Japan.

LUXEMBURG.

Patents are granted under the law of June 30, 1880, for the term of fifteen years upon payment of an annual tax of 10 francs for the first year; 20 francs for the second year, and so on, progressing at the rate of 10 francs for each year. Patents of addition are also granted expiring with the original patent. No prolongations are granted beyond the original term. Patents are granted without examination and at the risk of the applicants. The invention protected must be put in operation in Luxemburg within three years from the date of the patent. Patents can be assigned; the deed of assignment must be registered. Applicants for patents must present their petitions, accompanied by descriptions of the invention in French or German, and drawings, models, or specimens, when necessary to the comprehension of the invention. Patents expire at the end of their term, by default in payment of the taxes within three months of the time fixed; and if a similar patent is not applied for within three months in the States with which the Grand Duchy is allied by Customs Treaty. The patent will also be void if the invention is not good subject-matter for patent; if the description of the invention lodged is insufficient, or does not give to the best of the inventor's ability the means for carrying out the invention. Infringers of patents are liable to payment of penalties, varying from 100 to 2,000 francs irrespective of damages.

MEXICO.

The law which governs the grant of patents in Mexico is dated November 3, 1865. Every discovery or new invention can be patented in Mexico. Patents are granted to the first introducer of a new invention which has not been practised

in Mexico; and applications for patents by inventors who have already foreign patents for the same objects, are accorded a preference over others, but this preference does not extend to cases where the foreign patent has been public property. Pharmaceutical compositions, plans for working estates, or for financial combinations, and the application of known motors to industrial purposes also known are not patentable.

Patents are granted for five, eight, or twelve years according to the demand of the applicant, the Government duties being from 25 to 100 piastres for five years, from 100 to 200 piastres for eight years, and from 200 to 300 piastres for twelve years. Patents for improvements are granted for the time which remains of the original patent, if such duration exceeds six years; if such duration is less than for six years, patents for importation are only granted for five years.

Every applicant for a patent must address to the Minister of Commerce a petition setting out that the petitioner is either the inventor or is the assignee of the inventor, together with a description of the invention, and such drawings, specimens, or models as may be necessary for the proper comprehension of the invention.

The application must be limited to one principal object, with such accessories as are necessary for carrying out the invention. This description must be written in Spanish, and must be without alterations or corrections. The drawings must be made in ink and to scale, and must be in duplicate. All the documents must be signed by the inventor or by his attorney. The duration of the patent will commence from the date of the grant.

These documents are examined by officials, and the applications are then published in the official and other journals, and oppositions to the grants can be made within two months from such publication. The Government do not by the issue of the patent guarantee its utility, novelty, or validity.

The Government publish every three months the lists of patents granted. The description and drawings of the invention can be modified at any time during the duration of the patent. Patents of addition will be granted for improvements upon the original invention. These patents for improvements

can only be granted to the original inventor or his assigns for the first year of the patent.

Patents can be assigned in whole or in part, and assignments must be registered. Assignees are not, however, entitled to the patents for improvements without assignments of those improvements. The Minister of Commerce is to publish every year a catalogue of the specifications with illustrations of the drawings. Patents granted will be annulled if the alleged discovery is found to be old; if the alleged discovery does not come within the terms of the law for which patents are to be granted; if the alleged discovery is contrary to public policy; if the specification upon which the grant has been made is fraudulently expressed in indicating an object different from the true object of the invention; if the description lodged is insufficient to enable the invention to be put in operation; if the invention is not put into operation within two years from the date of the grant, or if its working is interrupted for two years unless the cause of inaction is satisfactorily accounted for; and also if the patentee introduces into the country the patented articles manufactured abroad. The permission of the Minister can, however, be obtained for the introduction of models. All patented articles must bear the word 'Patented,' must also bear the words 'Sans garantie du Gouvernement.'

The Act also gives the modes of proceeding to be adopted in the case of actions for annulment and in actions for infringements.

Patents are now obtained without difficulty in Mexico when the applications are made in proper form, and the inventor is represented by a competent agent. The cost is, however, considerable.

NICARAGUA.

The resolutions of the Spanish Cortes have by decree been declared in force in this republic. By virtue thereof, any person who shall invent, import, or introduce an invention, may, by application to the prefect of the department or the municipality, obtain a certificate granting him an exclusive right to such invention. The duration of the privilege is to

an inventor ten years, to an improver seven years, and to an introducer five years. These terms may be extended by the sovereign power. The invention must be worked within two years, or the privilege will cease.

In practice, however, the rules of the decrees are nôt closely followed, but an arbitrary power is vested in Congress, which grants a patent or withholds it as it sees fit.

NORWAY.

Patents for inventions are granted under laws of July 15, 1839, and May 9, 1842, for a period not exceeding ten years, and on condition that the inventor, before obtaining the patent, must give in a satisfactory account of when the invention was made and in what it consists, so that others after the end of the patent may put the invention into practical use.

The description furnished by the inventor must be accompanied by drawings in duplicate where the nature of the invention requires them.

Patents become void unless the patentee puts his invention into practical use in this country within a period of two years.

A fee to the State treasury of 10 specie dollars is paid for every patent.

PARAGUAY.

The law of May 20, 1845, enables inventions to be patented in this country.

Patents can be obtained by inventors being citizens or strangers alike, and also by the first introducers of inventions from abroad, and the patents can be assigned in whole or in part.

All new discoveries and improvements are patentable, and no examination is instituted prior to the grant.

Patents of invention, of improvement, and of importation are granted, and date from the day of deposit of the application. The term fixed varies from five to ten years. When there is a previous foreign patent for the same invention the duration of a patent of importation can not exceed six months beyond the termination of the foreign patent. Prolongations

of the original terms can be obtained where the circumstances justify such prolongations.

The invention patented must be worked in Paraguay within two years from the date of the patent.

Patents will be declared void if the specification is insufficient, if the inventor has not stated the best means for carrying out the invention, if the invention has been publicly used prior to the application, if the invention is not worked within two years from the date of the patent, if after having obtained a patent in Paraguay the inventor obtains a patent elsewhere without having first received authority to do so, or if any of the conditions of the patent are not fulfilled.

Legal proceedings can be taken against the persons infringing the patent.

PORTUGAL.

A royal decree, dated December 31, 1852, regulates the law of patents in Portugal, and the International Convention includes this State. Its principal provisions are to the following effect:—

Authors of new inventions, whether national or foreign, are entitled to secure an exclusive right in them by patent; but the patent will be no guarantee of the reality, priority, or merit of the invention. An invention, though in use in foreign countries, is, if new, patentable in Portugal for from one to fifteen years.

The duration of a patent privilege cannot exceed fifteen years; it is at the option of a patentee to obtain it for a less period from one year. To inventors who have already obtained a patent in a foreign country, no longer time will be granted than is sufficient to make up fifteen years from the date of the foreign patent. The importer of an invention (not being the inventor himself) can only obtain a patent for five years.

Prolongations are granted when demanded *within* the time of the first demand.

On applying for a patent, an inventor must deliver to the proper office an exact description under seal of the principles,

means, and processes which constitute the invention, with the necessary plans in duplicate, sections, drawings, and models.

A patent will not be allowed to comprise more than one subject-matter.

Patentees are required to work their patents officially within two years from the date of the concession.

An annual tax of 5,000 reis (about 28*s.*) is imposed on a patent, and default in payment of this tax renders the patent void.

Patent rights pass by assignment or by will.

A patent becomes void if the invention be not carried into effect within two years, or if the manufacture be adjudged a nuisance by a competent tribunal.

Russia.

The law as to privileges for inventions in Russia was declared by an imperial decree of June 17, 1812. On November 22, 1833, the terms of this decree were altered, and amendments were made:—October 23, 1840; August 15, 1845; July 7, 1852; May 22, 1862; February 16, 1867; April 22, 1868; and March 30, 1870.

The privilege granted for discoveries, inventions, or improvements in arts and manufactures is founded upon the letters patent and a certificate (obtained on presenting a petition to Government, accompanied by a full description of the invention with the drawings belonging to it, and in paying the Government tax), which certificate states that the invention therein mentioned was presented at such a date and hour to the Government, and that the Government tax has been paid. The term of the patent begins from the day of issue of the letters patent, but infringers are liable to be prosecuted from the date of the certificate of application.

Patent applications are subject to an investigation into the novelty, and partly into the merits of the invention.

No patents are granted for munitions of war (as, for instance, guns, projectiles, torpedoes, &c.) unless adapted to other purposes (as, for instance, hand fire-arms, metallic cartridges, &c.), when the grant will be made subject to the

rights of the Government to use the same without compensation.

Russian letters patent cover also Poland.

The Government does not guarantee that the invention belongs to the person who makes the application; it only certifies that for the same invention no privilege has been granted to anybody in Russia before.

The privilege granted by the Government does not prevent the true inventor from proving, in legal form, that the invention does not belong to the person who obtained the patent of invention.

Until the ownership of the invention is contested, the person to whom the privilege was granted has a right—

1. To the absolute property in the invention for the specified time.

2. To use the invention himself, and to sell its results to the public, or to transfer the privilege to another person.

3. To prosecute persons infringing the privilege in the courts of law, and to recover an indemnity for the loss sustained by the infringement.

4. To treat as an infringement the making of articles in a similar manner, even with improvements in them, as long as the essential parts of the first discovery are copied.

The applicant for a patent privilege must deliver to the Government an exact description of his invention, with all essential details, and declare the mode of carrying it into effect; and also furnish the necessary plans and drawings, not keeping back anything requisite to be known to enable the invention to be carried out. The inventor must state what he claims as novel. If the invention relates to hand fire-arms, or surgical instruments, or artificial building materials, a model or specimen must also be furnished.

Inventions made in foreign countries may be patented in Russia when no detailed description has been published, and when the inventions have not been already introduced into the Russian Empire and the foreign patents have not expired.

A patent for an imported invention has the same validity as one granted for an invention made in Russia, until it is shown that the invention had been brought into use before

the grant, or that it had been described in published books or papers in such a way that it could have been carried into effect without the patentee's description.

Patent privileges for original inventions, whether made in Russia or in a foreign country, patented or not patented abroad, are granted to the Russian or foreign inventor, or his assignee for three, five, or ten years (the extreme limit), at the option of the applicant. Patent privileges applied for by the mere importer for inventions still remaining under patent protection abroad are granted for one, two, three, four, five, or six years (the extreme limit), at the option of the applicant, but cannot endure beyond the expiration of the patent taken out abroad by the inventor himself. The Government charges amount on patents of invention for three years to 90 roubles, for five years to 150 roubles, and for ten years to 450 roubles; whilst for patents of importation the Government charges 60 roubles for each year of the duration of the patent. If the application be refused the Government tax is refunded with the exception of from 11 to 15 roubles for the advertisements of the application in the newspapers.

A patent will be void when it is shown to the proper tribunal that the invention has been already practised in Russia, or that, at the time of the presentation of a petition for a patent it had been previously described in books or periodicals published in Russia or elsewhere, so that it might have been carried into effect without further description. It will also be void where it is impossible to arrive at the promised result by following the directions of the patentee, or if the certificate of working will not be filed within the time prescribed.

No power of attorney is required for the person applying for the patent in case of the absence of the inventor or mere importer.

No prolongation of the term originally granted can be obtained. For improvements in a patented invention a new patent must be applied for. An invention for which a patent has been obtained must be carried into effect within one quarter of the space of time for which the patent was granted, and within six months after this a certificate of working from

some local authority must be filed at the Ministry which issued the patent. To prove the working the patented article, when a machine, may be imported, but if the patent is for a process, the manufacture must be carried out in Russia.

FINLAND.

Russian letters patent do not cover the Grand Duchy of Finland. Patents have been granted in Finland since the year 1842; a patent law was passed March 30, and came into operation on June 1, 1876.

Patents are granted for inventions or improvements in arts and manufactures. Medicines and inventions contrary to morals or public safety are not patentable. Patents are granted only to the true inventor, whether native or foreigner.

The Government does not guarantee the novelty or the merits of the invention. As long as the ownership of the invention is not contested, the person to whom the privilege is granted has a right—

1. To the absolute property in the invention for the time specified in the letters patent.

2. To use the invention himself, and to sell its results to the public, or to transfer the patent to another person.

3. To prosecute persons infringing the patent in the courts of law, and to recover an indemnity for the loss sustained by the infringement.

4. To treat as an infringement the making of articles in a similar manner with unessential differences.

The person applying for a patent must deliver to the Government an exact description of his invention, with all essential details, and the mode of carrying it into effect, and also the necessary plans and drawings, and models, if deemed necessary, not keeping back anything requisite to be known. The inventor has also to state in what respects his invention is new, or whether it is an improvement of an invention already used; the novelty of the invention or improvement must be specified in the claims.

Inventions made in foreign countries may be patented in Finland when no detailed description has been published, and when they have not been already introduced into the

Grand Duchy. Where an inventor has a patent for his invention in a foreign country, and has been compelled to publish a specification showing the mode of carrying his invention into effect, such publication does not prejudice the granting of a patent in Finland.

If the invention has been previously patented abroad, an authenticated statement must be given when the patent was issued, and for what term. In such a case the duration of the Finnish patent cannot extend beyond the expiration of the patent taken out abroad by the inventor.

Patent applications are subject to an investigation into the novelty and merits of the invention.

Patents are granted for the terms of from three to twelve years (the extreme limit). The duration of the patent is fixed by the Government in accordance with the state of that part of Finnish industry to which the invention appertains, or with which it is most nearly connected. The Government tax is 20 Finnish marks (1 Finnish mark=1 franc) for each year of the duration of the patent, but there are extra charges of the Finnish Senate to be paid, for registering the application, the issue of the certificate of application, stamps, poor rates, the sealing, &c., amounting to some hundred marks.

The patentee is bound, within two months from the date of issue of the letters patent, to publish the specification of his patented invention in two Finnish newspapers, in the Swedish and Finnish languages.

The time prescribed within which the patented invention must be worked is generally two years, but this time may be reduced to one year, or extended, by application, to a period not exceeding four years. After this proof of the working must be given every year.

The patent will be annulled if the patentee has not published the specification of his patented invention, or proved the working of it within the time prescribed; if it should be proved by verdict of a jury that the same invention or improvement for which a patent has been granted was already in use in Finland or elsewhere, or patented by another person before the application was made; or if it should turn out that the patent is contrary to morals or public safety.

In case of the absence of the inventor, the person applying for the patent must be duly authorised by power of attorney.

No prolongation of the term originally granted can be obtained. For improvements in a patented invention a new patent must be applied for.

San Salvador (Central America).

The constitution gives power to the executive to grant privileges to the authors of useful inventions, but no special law exists for regulating the grant of such privileges. It is customary, however, for the executive in the exercise of its prerogative to follow the practice of civilised governments. This State is also a party to the International Convention.

Spain,

including the Spanish colonies of Cuba, Porto Rico, and the Philippine Islands.

A greatly improved law with respect to patents for inventions came into operation on August 1, 1878, and Spain is a party to the International Convention.

Under the new law many facilities are afforded for the introduction into Spain of numerous inventions which the restrictions and cost of obtaining patents under the old law precluded. A most valuable feature of the new law is, that one patent includes not only Spain, but the colonies of Cuba, Porto Rico, and the Philippine Islands, for each of which a separate and most costly patent has hitherto been requisite. To render the patent valid in the Spanish colonies it must be placed with the Minister of Ultramar at Madrid.

The rights of foreigners are the same as those of natives, as regards obtainment of patents.

Two classes of patents are granted, one to inventors, and another to those who, without being inventors, introduce or import a new industry into Spain or the colonies.

Patents for *invention* are granted for twenty, ten, or five *years*; those for introductions for five years.

The proprietorship of a patent is hereditary, and can be

sold or negotiated, just as any other property, according to the existing laws in Spain.

Patents are granted to one or more individuals, or to a society or company.

Patents of invention are granted to all who solicit them, without previous examination as to the novelty or usefulness of the invention.

Foreigners must apply for patents in Spain before their inventions are published and made known elsewhere, so that the *invention* may be considered as new in Spain; in such case the patent will be granted for twenty years. But if a foreigner allows *two years* to pass from the time in which his patent was published, or made known in another country, before soliciting the same patent in Spain, he then incurs the risk of any one proving before the Spanish courts that his invention was *published* when he applied for the patent in Spain, in which case the patent will be granted for *ten years only.*

The annual taxes are 10 pesetas (10 francs) for the first year; 20 pesetas (20 francs) the second year; 30 pesetas (30 francs) the third year, and so on successively, each year 10 pesetas (10 francs) more than the previous year.

The following documents are needed on application for a patent:—

1st. A power of attorney in Spanish, indicating the name and residence of the person in whose name the patent is to be granted.

2nd. A complete specification, explaining the invention and the points claimed. The patent will be granted on the point or points specified in the claims. The references to weights or measures in the specifications must be made in accordance with the French Metrical System.

3rd. The drawings must be on *tracing cloth*, in black ink, without colours or colouring, on the French Metrical Scale, and in duplicate.

If, on examining the documents and papers in the *Art Conservatorio*, it should be found that they are incomplete, or not presented according to this law, *two months* will be allowed to the applicant to correct the error if the inventor resides in Europe; *four months* if he resides in America;

and *eight months* if he resides in Asia. No secrecy will be observed, as formerly, with regard to the patents granted. The specifications and drawings will be open to the public in the *Art Conservatorio.*

Certificates of Addition are granted. During the whole term of a patent, the owner, his heirs, or the person representing his rights, can obtain protection for improvements on or additions to his original patent. The *Certificates of Addition* will be granted and considered as parts of the original patents. They are solicited in the same manner as the patents, and terminate when it terminates. Instead of soliciting a *Certificate of Addition*, a new patent, independent of the principal one, can be obtained *for improvements.*

The sale, cession, or negotiation of patents can be made before a notary in any country. If the cession is made in Spain, a special power must be sent for it. If the cession is made before a foreign notary, out of Spain, the document or contract must be made directly in Spanish, or must be officially translated in the Spanish Legation or Consulate.

All documents sent to the Patent Office department must be legalised in the Spanish Legations or Consulates of the places from whence they come. In the contracts of sale or cession, a certificate from the *Art Conservatorio* of Spain must be transcribed to prove that the annual taxes on the patent are paid up to the date of the contract, and that the patent is in full force, and that the patentee has not disposed of his interest. The sale or cession of the patents, with all the requisite formalities, must be registered in the Gobierno-Civil at Madrid.

Two years are allowed for the official working of the patent in Spain, but this term can be prorogued by a special law passed in the *Cortes* to that effect.

Patents will be declared void when their owner ceases to pay the annual charges, or when he has not proved officially that he has worked the patent within the two years.

Patents may be annulled at the instance of a third person and by the sentence of a Spanish court in case it is proved the invention was not *new* when applied for, or because the

specification does not sufficiently describe the manner in which the invention is to be worked.

The infringement of a patent is punishable with a fine. All articles wrongfully manufactured under the patent infringed are to be delivered to the rightful owner of the patent, and the patentee has a right, besides, to claim damages. If the infringer is not able to pay the fine, he will be imprisoned for a proportionate length of time.

Counterfeiters of patents will be also punished according to the Spanish Criminal Code.

Governors of the Spanish colonies can no longer grant patents. All patents must be applied for in the Ministry of Fomento, at Madrid, and will be granted for Spain and *all* her colonies in one patent.

SWEDEN.

By a royal ordinance, bearing date August 19, 1856, the following regulations concerning patents are made :—

Patents are granted—1st, for new inventions, whether they consist in machinery or in some art; 2nd, for improvements on old inventions. They are not granted for medicines, nor for bare principles.

Patents are not granted for a shorter term than three years, nor for a longer term than fifteen years, and the length of time will depend upon the value and importance of the invention. The inventor only can obtain a patent.

Any one who has obtained a patent in a foreign country can obtain one in this kingdom; but the term will never extend beyond the duration of the patent in the foreign country.

A full description of the invention, accompanied when necessary by drawings, must be lodged along with the petition at the Chamber of Commerce.

The patentee is required to furnish, before the expiration of two years, to the Chamber of Commerce, proof that he is in full exercise of the patent—which period may be reduced to one year, or may be, in consequence of a petition to that effect, extended to four years, this being regulated by the

value and importance of the patent in question; and also to furnish annually, during the entire period in which the patent right remains in force, proofs that he continues to exercise the invention.

Patents may be assigned when certain formalities have been complied with.

If a patent has been granted for an invention of the same nature as one previously patented or exercised by some other person residing in the kingdom; or if the holder of a patent has given in an inexact description of the means employed for the working of such invention, so that the real nature of the invention cannot be properly understood; or if the holder has given himself out to be the inventor without being so; or if a patented invention contains anything injurious to the public safety or health, or anything having an immoral tendency, the patent will be declared void.

The specification must be published in the Official Gazette within two months from the grant of the patent.

SWITZERLAND.

Patents are not procurable in the Swiss Confederation, excepting in the Canton of Tessin, where the local government has power to grant, on payment of a sum varying from 2*l.* to 20*l.*, an exclusive privilege within its territory.

It is, however, anticipated that a law of patents will shortly be passed for the whole confederation, as Switzerland is a party to the International Convention.

TURKEY.

The Ottoman Government grant patents to natives or foreigners for five, ten, or fifteen years, subject to an annual tax of two Turkish pounds, but the Turkish patent will expire with the termination of any earlier foreign patent. Pharmaceutical compounds or medicines and financial combinations are not patentable, and the inventions must not have been published in Turkey or abroad. The applicant for a patent must supply a petition, a description and drawings, or

samples to explain the invention. The petition must be limited to a single object with the details which form part of it, and must indicate the term for which the patent is solicited. The term of the patent is reckoned from the date of filing the application. Patents are granted without examination and at the inventor's own risk. Inventions relating to instruments of warfare are submitted to the War Department, and such as are approved by the department are bought by the State. Inventions of this kind which are not favourably reported upon are rejected.

The term of the patent can only be prolonged by special legislation.

Certificates of alteration, addition, or improvement, are granted. The patentee is, however, alone entitled to receive a certificate of addition during the first year of his patent. If such applications are made by others they will be kept secret until the first year of the patent has expired, and will then be granted.

Patents may be assigned in whole or in part by a deed of assignment, which must be registered with the Minister of Commerce; and the specifications, drawings, and models are accessible to the public, and may be copied.

Patents are invalid when the invention is not new, or when they are for mere principles, when the invention is contrary to public morals, when the title of the patent is fraudulently misleading, or when the specification is insufficient. Patents will become void in default of payment of the annuities, when the invention is not worked within two years from the date of the patent, or if the working is thereafter discontinued for two consecutive years, unless the patentee can show cause to justify his inaction, or by the introduction of articles manufactured abroad according to the invention, unless by special authorisation of the Government.

Any interested person may bring an action before the Tribunal of First Instance to rescind the patent, and infringers of patents are liable to a fine of from five to one hundred Turkish pounds.

VENEZUELA.

Patents are procurable under the law of 1878 for a term of not less than six nor more than fifteen years for new discoveries, inventions, or improvements, and for the importation from abroad of manufacturing processes or industrial improvements. The applicant has to address a petition to the Minister of the Interior, accompanied by a declaration stating that he is the true inventor, and by a description of the invention, and a patent will be issued by the President of the Republic. Patents of invention become void if not worked within two years, and imported patents within one year of their date. The term of the exclusive privilege for the selling of the patented articles dates from the commencement of the working of the patent. The factory, plant, &c., of the patentee are subject to an annual government tax not exceeding one per cent. of their cost. Primary materials required for the manufacture are exempt from import duties, but the patented article must be manufactured in the country and not imported from abroad. Patents may be assigned. Infringers are punishable by fine and imprisonment.

PATENT LAWS OF THE BRITISH COLONIES.

Since the Imperial Government has declined to issue any grants of patents for colonies, most of our colonies have themselves established patent laws, principally framed upon the British law. Many of the colonies now grant a large number of patents, but it is obvious that except in special cases patents are not often required in the smaller colonies. The number of patents granted in Canada, India, and the Australian colonies is constantly increasing.

THE AUSTRALIAN COLONIES.

New South Wales.

The Act of the Colonial Legislature relating to patents is dated September 14, 1852.

Every person who, upon claiming to be the author or designer, by his agent or assignee, of any invention, shall be desirous of obtaining a letter of registration, shall deposit with the Colonial Treasurer the sum of 20*l.* sterling, and shall, after such deposit, present a petition to his Excellency the Governor, setting forth that he is the author or designer of such invention, or the agent or assignee of the author or deviser, as the case may be, and specifying the particulars of such invention, and that he has deposited with the Colonial Treasurer the sum of 20*l.*; whereupon the application is referred to a board consisting of two scientific men; and if their report is favourable, the Governor may grant the letters of registration, and such letters of registration, within three days after the granting thereof, are to be registered in the proper office in the Supreme Court. Every grantee of such letter of registration can assign the same to any person or

persons by an instrument in writing under his hand and seal, to be registered in the Supreme Court in the same manner and within the same period after the execution thereof as the original letters of registration.

The letters of registration may be repealed by *scire facias*.

New Zealand.

The New Zealand Patents Act, 1883, has effected a considerable alteration in the law of patents in New Zealand: inventors can now obtain either letters patent or letters of registration as they think fit. The fee for letters of registration remains at 10*l*., as it did under the New Zealand Patents Act of 1870. The fee for letters patent is reduced to 2*l*. 10*s*., and the further duties to 5*l*. at the end of five years. Letters patent which are unopposed will be granted as a matter of course; if opposed, the expense of meeting the opposition may be considerable. Letters patent can only be granted to the inventors themselves, and not to their assignees. Letters of registration will be granted as of course, on proof of the applicant being the actual owner of the foreign patent.

The patented inventions must be worked within two years from the date of the patent; as the new Act has only just come into operation, the actual requirements of the office are not yet well understood.

Queensland.

No substantive patent law has been enacted in the colony of Queensland since its separation from New South Wales, but the Colonial Act (New South Wales), 16 Victoria, No. xxiv., September 14, 1852, was continued in force in the colony by an Order in Council of November 6, 1859, and a patent can be obtained similar in terms to those granted in New South Wales, and at the same cost. A short Act was passed in 1867 by which inventions can be provisionally protected in this colony, but these protections would appear to be useful only to residents in the colony.

South Australia.

The patent law of this colony is now embodied in two Acts, called respectively 'The Patent Act, 1877' (which was passed December 21, 1877), and 'The Patent Act Amendment Act, 1881' (which was passed September 28, 1881).

Every applicant for letters patent must present a petition and declaration, together with specification and drawings in duplicate. These must be signed by the applicant, who may be either the inventor or his assignee; the declaration being made before any competent authority, and the specifications and drawings attested by two witnesses. The place and date of signature must also be stated in every case. The documents may be signed under power of attorney from the applicant.

The fees are somewhat low, but the Commissioner of Patents always exercises his power of referring applications to examiners at a cost of at least 2*l.* 12*s.* 6*d.* And further, inasmuch as every application is advertised, and the specifications are open to the public at large before the grant of the patent, an undue amount of encouragement is offered to litigious persons to oppose applications.

Fees of 2*l.* 10*s.* each have to be paid at or before the expiration of the third and seventh years respectively.

Tasmania.

The law of patents in this colony was established by an Act passed November 5, 1858.

The proceedings to obtain patents are very similar to those at home, and the provisions with respect to actions, disclaimers, &c., are also much the same.

The Government fees are about 7*l.* 10*s.* on application, and a stamp duty of 15*l.* is to be paid at the expiration of the third year, and 10*l.* at the expiration of the seventh year of the grant.

Victoria.

An Act of the Colonial Legislature, entitled 'An Act to Consolidate the Law concerning Letters Patent for Inventions,'

was passed in May 1865, being Act No. 240 of the session held in the twenty-eighth year of Queen Victoria. The previous Patent Acts were first repealed, and then power was given to the Governor of the colony to issue letters patent, the language of the Act being nearly the same as that of the British statute of James I.

All applications for letters patent for an invention are to be made as follows:—The applicant must deposit a specification, accompanied by drawings when necessary, at the office of the Registrar-General. Provisional protection for six months is thereby obtained. The form of the specification, and the size of parchment, are set forth in the Act. The subsequent proceedings are pretty much the same as those had in obtaining British patents.

The patent will become void unless the sum of 15*l.* is paid before the expiration of the third year, and the sum of 20*l.* before the expiration of the seventh year.

The colonial patent will expire at the same time as the foreign patent, in case any foreign patent should have been previously obtained.

A patentee or his assignee is authorised to file disclaimers or memoranda of alterations.

Patents may be prolonged by taking the proceedings prescribed in the Act; but the patentee or his assignee must make application for this purpose at least six months before the expiration of the original term.

The schedules of the Act contain forms of petitions, notices, letters patent, &c.

Western Australia.

The special Colonial Act is dated August 15, 1872.

The *bonâ fide* holders of letters patent in any other country can obtain letters of registration having the force of letters patent, and expiring with the original patents. The Government fee is 25*l.*, and is paid in one sum.

Original letters patent can also be obtained, but are seldom taken out except by residents in the colony. The Government fees on these letters patent are 50*l.* These letters

patent are only granted when application for a patent is made in the colony before being made anywhere else.

British Guiana.

The law relating to patents is governed by an ordinance dated July 12, 1861.

Every inventor desirous of obtaining a patent must petition the Governor for the grant. The form of the documents is very similar to those in use in Great Britain, and the proceedings under the petition are also very similar, there being a reference to the Attorney-General, whose duties in respect to patents nearly resemble those of the same officer at home.

The conditions of the patents granted are nearly, if not precisely, similar to those of the British grants, and there is a duty of 100 dollars payable in the seventh year of the term. The patent is granted for 14 years, and the Governor has power to prolong the patent for a term not exceeding 7 years.

The ordinance also contains provisions as to disclaimers similar to those in operation at home.

British Honduras.

Patents are now granted for this colony, under the Act for amending the law for granting patents for inventions, dated September 10, 1862.

The provisions of this Act bear a general resemblance to those in the 'Patent Law Amendment Act' of 1852. Commissioners of patents for inventions are appointed, who have power to make rules regulating grants. Every applicant must petition the commissioners, and the petition and accompanying specification are referred to the Attorney General for the colony. The applicant can lodge either a provisional or a complete specification in the first instance. The Attorney General grants a certificate of allowance, which certificate is filed in the office of the Colonial Secretary, whereupon the invention is protected for six months. This protection is advertised, and the applicant is at liberty to

give notice to proceed; and on the expiration of the time allowed for oppositions, letters patent are granted for fourteen years. The letters patent are void unless duties are paid at the expiration of three and seven years from the grant. The letters patent expire on the determination of any earlier patent granted for the invention in Great Britain, or in any foreign country or British colony. This Act also provides for a 'Register of Patents' and a 'Register of Proprietors' being kept. Patentees may also enter disclaimers or memoranda of alteration. The Commissioners of Patents are authorised to grant prolongations of the original term not exceeding seven years. Actions for infringements must be brought in the Supreme Court of the Colony.

The Government fees on sealing—

Letters patent amount to	$30
Third year's duty	50
Seventh year's duty	100

CANADA.

The law of patents for the Dominion of Canada, which includes the provinces of Ontario, Quebec, Nova Scotia, New Brunswick, Prince Edward's Island, Manitoba and British Columbia, and the North-West Territories, is regulated by the 'Patent Acts, 1872 to 1875,' and by the subsequent amendment of 1883.

Patents may be obtained by inventors or their assignees for all inventions not being in public use, or on sale in Canada, for more than one year before the application for the patent. Inventors are not entitled to patents on their inventions if patents therefor have been in existence in any other country more than twelve months prior to the application in Canada. Where a foreign patent exists, the Canadian patent expires at the earliest date at which any foreign patent for the same invention expires. Two or more separate inventions cannot be included in one patent.

An inventor applying for a patent has to make oath that he is the inventor, and must elect a domicile in Canada.

The specification is required to be in a peculiar form, in

duplicate, and must concisely state the claims: it must be illustrated when practicable by drawings in duplicate, while an additional drawing showing the most important parts; and a working model not exceeding twelve inches in length is also requisite, or if the invention be for a composition of matter, specimens of the ingredients.

The term for which patents are granted is fifteen years, but only one-third or two-thirds of the fees for that period need be paid to obtain the patent, which will in such cases become void at the end of five or ten years respectively unless the balance, or another third of the fees, is paid during its pendency.

A patentee may file a disclaimer of any portion of the specification claiming matter found not to be novel; and an original patent insufficiently covering the invention may be surrendered, and a new patent with amended specification and claims be issued in its stead. It must be shown that the matter of the re-issue might have been embraced in the original patent. No new matter can be introduced.

The Government of Canada reserves the right to use patents, paying such compensation for so doing as the Commissioner of Patents reports to be reasonable.

Patents are assignable in whole or in part. Assignments require registration in the Patent Office.

Actions for infringements may be brought in any court of record, having jurisdiction to the amount of the damages asked for, and having its sittings in the province where the infringement has taken place.

Patents are void if any material allegation in the petition or declaration be untrue, or if the specification contain more or less than is necessary, if such omission or addition is wilfully made for the purpose of misleading; but if the court is satisfied that such omission or addition is an involuntary error, and the patentee is proved to be entitled to the remainder of his patent *pro tanto*, the patent is to be held valid for such part of the invention.

Patents become null and void at the end of two years from their date unless the patentee shall have commenced, and shall after such commencement continuously carry on, in

Canada, the construction of the invention; and shall be void if, after the expiration of twelve months from the date of the patent, the patentee shall import into Canada the invention. In case of any dispute as to whether a patent is or is not void, such dispute is settled by the Minister of Agriculture or his deputy.

A patentee may, on good reason being shown, obtain an extension of the time allowed for putting the patent into operation, and for importation of the patented article.

The Government fee payable on a patent is—

For five years	$20
„ ten „	40
„ fifteen „	60
Extension from five to ten years	20
„ „ ten to fifteen years	20

Inventors not having perfected their inventions may have their inventions protected by caveats.

The commissioner may object to grant patents when he is of opinion the invention is not patentable in law; when the invention is already in the possession of the public; when there is no novelty in the invention; when the invention has been previously described in a printed book, and when the invention has already been patented in Canada or elsewhere more than one year before the Canadian application. In such case the amount of the Government fees filed, less ten dollars, will be returned to the unsuccessful applicant.

Every patentee is compelled to stamp on each patented article sold by him, or on the package enclosing such articles, the year of the date of his patent, and the word 'patented,' or any abbreviation of the same.

All applications for patents must be proceeded with and perfected within two years after application.

Cape of Good Hope.

This Colonial Legislature has adopted a system very similar to that of the mother country, governed by an Act passed in 1860.

The applicant for a patent must deposit at the office of

the Colonial Secretary a specification of his invention, which is referred to the Attorney General, who reports upon it, and the Attorney General issues a warrant for the grant.

A writ of *scire facias* may be sued out for the repeal of the patent.

The letters patent are void unless a stamp duty of 10*l.* is paid at the expiration of the third year, and of 20*l.* at the expiration of the seventh year of the grant.

Letters patent for foreign inventions expire with the foreign grant.

The regulations as to disclaimers, prolongations, and confirmations, are similar to those of the home patents.

A register of patents and of proprietors is kept.

There is a penalty of 100*l.* for the unauthorised use of the word 'patent.'

Particulars of breaches and of objections are to be given in patent actions.

CEYLON.

The Inventions Ordinance 1859 governs the law of patents in this country.

The inventor of any new manufacture may petition the Governor for leave to file a specification thereof; such petition must be in writing, and signed by the petitioner or his agent, and must state the name, condition, and place of residence of the petitioner, and the nature of the invention, upon which the Governor may order the petitioner to file a specification.

The specification must be filed within six months from the date of the order, upon which the Governor may grant to the inventor the sole and exclusive privilege of making, selling, and using the said invention in Ceylon for the term of fourteen years from the time of filing such specification; and for a further term not exceeding fourteen years, upon petition to be presented by such inventor, not more than one year and not less than six months before the expiration of the exclusive privilege thereby granted.

The specification must be in writing, and signed by the petitioner, and must particularly describe and define the nature of the invention, and the manner in which the same is to be carried out.

No specification can be filed until the petitioner has paid all fees. The fee on filing a specification is 10*l*.

Hong Kong.

The ordinance for this colony is No. 14 of 1862, by which all British patents can be extended to Hong Kong. A petition, specification, and declaration are to be filed in the office of the Colonial Secretary, and notice thereof and of the intention to apply for letters patent and of the time of the sitting of the Executive Council, before whom the matter of the petition will come for discussion, together with such other particulars as the Governor shall require, must be inserted twice in the 'Hong Kong Government Gazette.' The Governor, by the advice of the Executive Council, will either grant or refuse the patent. The letters patent, when granted, are directed to be in the form prescribed by the Patent Law Amendment Act, 1852, for British letters patent, and the letters patent, if granted, confer privileges similar to those granted by British letters patent.

The petitioner must, in all cases, be either the patentee or the owner by assignment of the patent in Great Britain.

India.

The Act relating to patents for inventions is dated May 17, 1859.

Exclusive privileges may be obtained for protecting the invention or improvement of any art, or process, or manner of producing, preparing, or making an article, and also the invention or improvement of any article prepared or produced by manufacture. It is required that the invention be useful, and that it be new; and an invention is to be considered new if it have not, at the time the exclusive privilege is applied for, been publicly used in India or in any part of

the United Kingdom, or been made publicly known in any part of India or of the United Kingdom by means of any written or printed publication. If, however, the knowledge of an invention has been obtained surreptitiously, or has been communicated to the public in breach of confidence, the public use or knowledge is in that case to be no bar to the acquisition of the exclusive privilege, if the inventor have not acquiesced in it, and if he make his application within six months after the public use has commenced; nor is the use of an invention by an inventor, or his agent, or any person with its licence, for a period not exceeding one year before the exclusive privilege is applied for, to be deemed a public use within the meaning of the Act. The provisions of the Act are available, not merely for actual inventors, but also for the personal representatives and the assignees of actual inventors; and they extend also to foreigners, whether resident abroad or not. The importer of a new invention into India is, however, expressly excluded from the benefits of the Act, unless he be also the actual inventor, or his personal representative or assignee.

The exclusive privilege is acquired by merely filing a specification of the invention, upon which, without any further process, the applicant becomes at once entitled to the exclusive right of using and selling the invention in India, and authorising others to do so, for the term of fourteen years from the date of filing the specification. Leave to file the specification must, however, be previously obtained; and for this purpose a petition must be presented to the Governor General in Council, who is empowered to refer it to any person or persons for inquiry, and, in the event of an order authorising the specification to be filed being granted, to annex any conditions he deems proper to the order. The fees attending the inquiry are paid by the petitioner, and no specification is to be filed until all the fees have been paid. Every specification must be filed within six months after obtaining the Governor General's order.

The specification must be confined to one invention only; it must be in writing, signed by the petitioner, and must par-

ticularly describe the invention, and how it is to be performed. The petition and specification are each accompanied by a declaration, signed by the petitioner, or by his agent if he be absent from India, stating that he is in possession of the invention, which he believes will be of public utility, and that to the best of his belief it is not known or used in India, or in any part of the United Kingdom, and that it is truly described in the petition and specification. Persons making false statements in these declarations are to be considered guilty of perjury; and wilful misstatements in the petition or specification will render the exclusive privilege liable to be declared void. The specifications filed under this Act are registered in a book, kept in the office of the Secretary to the Government Home Department, open to the public on payment of a small fee. If the patent has been taken out in England by an agent as a communication it must be assigned to the inventor, and the assignment must accompany the specification for India.

Any part of an invention may be disclaimed, should it appear at a future time to the petitioner that he ought not to have included it in his petition or specification; and in case of any defect or insufficiency in the latter, leave may be obtained to file an amended specification, which, however, is not to extend the exclusive privilege before acquired. In both these cases, moreover, it must be shown that no fraud has been intended. The term of an exclusive privilege may be extended for a term not exceeding fourteen years from the expiration of the first fourteen years, upon taking certain proceedings not more than one year, nor less than six months prior to the expiration of the original term.

Every exclusive privilege granted is to cease, if the Governor General in Council shall declare the same, or the mode in which it is exercised, to be mischievous to the State or prejudicial to the public. Further, if satisfactory proof be afforded to the courts of law that any condition, upon which leave to file a specification was granted, has been broken, power is given to the Governor General in Council to declare that the exclusive privilege thereby obtained shall cease.

Any inventor who has obtained letters patent for the exclusive use of an invention in the United Kingdom may, by taking proper proceedings within six months from the date of filing his complete specification in England, obtain protection in India for his invention, which is to be deemed new there if it was not publicly used or known in India before the date of the petition for letters patent; but no such exclusive privilege is to extend beyond the term of the letters patent, unless they are renewed, in which case the exclusive privilege may also be extended for a like term.

If any person, not being the actual inventor, or the representative or assignee of an actual inventor, has fraudulently obtained any exclusive privilege for protecting an invention, he may be compelled, upon proof of the fraud, to assign the exclusive privilege to the actual inventor, or his representative or assignee, and to account to him for the profits.

The Act contains provisions allowing persons to apply to the courts of law for a declaration that any alleged exclusive privilege has not been acquired, in consequence of non-compliance with the requirements of the Act; and there are also regulations respecting the conduct of proceedings to restrain infringements, &c.; but as these relate mainly to the practice of the Indian Courts it is unnecessary further to refer to them here.

The Indian Government in granting patents reserve to themselves the right to use the invention without compensation to the patentee.

JAMAICA.

The law of patents in this island is governed by an Act passed in the year 1857, the 21st Victoria, chap. 30.

Every inventor desirous of obtaining a patent must petition the Governor; the petition, accompanied by a declaration as to the invention, and a specification fully describing the same, is then referred to the Attorney General, who gives a certificate of his allowance, upon which the Governor issues letters patent.

Drawings are to be furnished in duplicate.

The patent must be brought into operation within two years from the date of the patent.

The term of the grant is for fourteen years, and may be extended for a further period of seven years.

The patentee is at liberty to assign all or any part of his rights, and patents may be issued to assignees of any persons who have obtained patents in other countries.

The Act also makes provision as to disclaimers, and provides that a patentee may add a specification or description of any improvement upon the original invention, and have the same annexed to the original specification.

The Act also contains provisions as to pleadings and costs in actions, as to the writ of *scire facias*, and as to the appointment of commissioners.

All applications for a patent must be accompanied by a power of attorney, bearing the English stamp duty; proved as required by the local statute, 27th Victoria, chap. 17.

The letters patent bear a stamp duty of 6*l.* 10*s.*

The fee for reference to the Attorney-General is 5*l.*

Leeward Islands.

The Leeward Islands consist of Antigua, Montserrat, St. Christopher, Nevis, Dominica, and the Virgin Islands. The law of patents is contained in the Acts No. 12 of 1876 and No. 16 of 1878. The Attorney General, the Auditor General, and the Treasurer of the Presidency of Antigua, with such other persons as may be appointed by the Governor, are the Commissioners of Patents. Patents are granted for the term of fourteen years on applications, including a petition, declaration, and specification. The proceedings in applications for patents are very similar to the proceedings under the British Patent Law Amendment Act of 1852. The patent becomes void with the expiration or determination of any earlier patent elsewhere for the same invention, and no patent granted in the colony after the determination of any earlier patent elsewhere is valid. The Acts provide for the printing of all specifications, registers of patents, and registers of proprietors. Actions for infringements are regulated by the Code

of Civil Procedure. The payments amount to 28*l.* in the case of every unopposed patent. A duty of 10*l.* is payable at the termination of three years, and a duty of 20*l.* is payable at the end of seven years. The stamp duty on a disclaimer is 3*l.*, and a fee of 2*l.* is also payable to the Attorney General in respect of each disclaimer.

MAURITIUS.

The law of patents for this colony is regulated by an ordinance of the Governor of Mauritius dated May 22, 1875. The Governor, with the consent of the Council of Government, is empowered to grant patents for inventions for a period not exceeding fourteen years, and for such further term not exceeding fourteen years as the Governor in Council may think fit. The patent may be applied for either by the inventor or by his executors, administrators, or assigns.

The application must be in the form of a petition and declaration, and must be accompanied by a specification and drawings. These papers are referred to the Procureur General; and if he approves of them, he is authorised to issue a certificate to that effect, and the inventor is thereby provisionally protected. A payment of 10*l.* is to be made to the Procureur General upon the issue of his certificate. After the issue of the certificate the application is advertised in the Gazette, and any opposition thereto must be entered within one month from the advertisement. If there is no opposition the patent is sealed upon payment of 2*l.* to the Receiver General, and upon deposit, in the office of the Colonial Secretary, of a printed copy of the petition and specification.

The patentee has power to amend his specification upon petition to the Governor. No patent is to be granted for an invention in respect of which a patent has been granted out of the colony and has expired. The importer into Mauritius of a new invention is not deemed an inventor unless he is the actual inventor. The use of an invention in public by the inventor, or by his servants or agents, or by any other person with his licence, for a period not exceeding one year prior to

the date of the petition, is not deemed a public use within the meaning of the ordinance.

An inventor having obtained British letters patent may obtain a patent in Mauritius provided the application be made within twelve months from the date of the letters patent, although previously known or used in Mauritius, provided that such knowledge or use in Mauritius was not prior to the date of the British patent.

The ordinance also regulates the proceedings in cases of infringement of letters patent.

NATAL.

The law of patents for this colony is governed by the Colonial Act No. 4 of 1870, 'To provide for the granting in this colony of patents for inventions,' and is based on the provisions of the Patent Law Amendment Act of 1852.

The power of granting letters patent for fourteen years is vested in the Lieutenant Governor. Applicants are required to deposit in the office of the Attorney General a description of the invention or provisional specification; a certificate of such deposit is given to the applicant, whereupon the invention is protected for six months. In lieu of the provisional specification the applicant may, if he thinks fit, deposit a complete specification with the Attorney General. The applicant may give notice to proceed immediately after the deposit of his specification. This notice to proceed is advertised in the Government Gazette. After the expiry of the period allowed for oppositions, the Attorney General grants his warrant, upon which letters patent are sealed. The letters patent are void unless certain duties are paid at the expiration of three and of seven years. The letters patent also expire with the determination of any British or foreign patent of an earlier date. Patentees are at liberty, with leave of the Attorney General, to enter disclaimers or memoranda of alteration. The Lieutenant Governor is empowered to grant prolongations of the original term not exceeding fourteen years. The law provides that a 'Register of Patents' and a 'Register of Proprietors' shall be kept.

All actions for infringements are to be brought in the Supreme Court.

The fees for sealing the letters patent are £1 10*s*.
Third year's duty 5
Seventh year's duty 10

Newfoundland.

The law of patents for this colony is now based upon an Act passed May 12, 1856.

Inventors desirous of obtaining patents in Newfoundland must present a petition to the Governor for the grant, and must deliver into the office of the Colonial Secretary a specification of the invention, and, in case of a machine, a model also. The patent is granted upon this petition, after a reference to the Attorney General.

The patent is granted for fourteen years, but may be extended for a further term of seven years.

St. Helena.

Under Ordinance No. 3 of 1872, British letters patent may be extended to this island. The patent right is only granted to a British inventor, his executors, administrators, or assigns. The duration of the patent is limited to that of the British patent, and the applicant must deposit certified copies of the British patent and specification in the registry of the Supreme Court of the island.

Straits Settlements.

The ordinance for granting exclusive privileges to inventors is No. 12 of 1871, dated November 15, 1871.

Exclusive privileges may be obtained by actual inventors or first importers of inventions not publicly used or known in the colony. An invention shall be deemed new if it shall not, prior to the time of applying for leave to file a specification, have been publicly used by other than the inventor in the United Kingdom or the colony.

Exclusive privileges are obtained by inventors petitioning the Governor in Council for leave to file a specification, whereupon the Governor may make an order authorising the petitioner to file a specification. If the specification be filed within six months after the date of the Governor's order, the Governor may grant the petitioner an exclusive right to use the invention in the colony for the term of fourteen years, and for such further term, not exceeding the term of fourteen years, as the Governor may direct upon petition presented to him at any period not more than one year and not less than six months before the expiration of the original term of the exclusive privilege. Errors, defects, or insufficiency in specifications may be corrected by disclaimers or by filing amended specifications.

Inventors having obtained British or British-colonial patents, may obtain exclusive privileges during the remainder of the term for which such British or British-colonial patents may have been granted.

Actions for infringement of the exclusive privileges may be maintained in the Supreme Court of the colony; and the rules regulating such proceedings appear to be greatly in favour of the holders of exclusive privileges. Appeals from the Supreme Court may be made to her Majesty in Privy Council.

The stamp on a petition for the grant of an exclusive privilege is $50.

TRINIDAD.

The ordinance for granting exclusive privileges to inventors is No. 25, dated September 2, 1867.

On application to the Registrar General of the island, and on delivery to him of a declaration, accompanied by a specification, he will issue a certificate, which must be advertised in the Official Gazette. The specification may be delivered open or in a sealed envelope. In the latter case the Registrar General will, at the end of six calendar months from the date of the certificate, or at an earlier day at the request of the patentee, break the seal of the envelope and register the specification.

The certificate vests in the applicant the exclusive right to the invention within the island for fourteen years; but if at any time during that term it shall be made to appear that the invention is not new as to the public use and exercise thereof in the island, or that the invention is prejudicial or inconvenient to the public, then the applicant's exclusive privileges will become void.

The fees payable to the Registrar General on leaving the declaration and specification, and for publication of same in Gazette, amount to £10 10*s*.

PART III.

INTERNATIONAL CONVENTION.

Article I.

The Governments of Belgium, Brazil, Spain, France, Guatemala, Italy, Holland, Portugal, Salvador, Servia, and Switzerland constitute themselves into a Union for the protection of industrial property.(1)

Article II.

The subjects or citizens of each of the contracting states shall, in all other states of the Union, as regards patents . . . enjoy the advantages that their respective laws now grant, or shall hereafter grant, to their own subjects or citizens.

Consequently, they shall have the same protection as the latter, and the same legal recourse on any infringement of their rights, provided they observe the formalities and conditions imposed on subjects or citizens by the internal legislation of each state.(2)

Article III.

Subjects or citizens of states not forming part of the Union, who are domiciled or have industrial or commercial establishments on the territory of any of the states of the Union, shall be assimilated to the subjects or citizens of the contracting states.

Article IV.

Any person who has duly registered an application for a patent . . . in one of the contracting states, shall enjoy, as regards registration in the other states, and reserving the

[1] *Vide* paragraph 1 of Protocol.
[2] *Vide* paragraph 3 of Protocol.

rights of third parties, a right of priority during the periods hereinafter stated.

Consequently, subsequent registration in any of the other states of the Union before expiry of these periods shall not be invalidated through any acts accomplished in the interval, either, for instance, by registration, by publication of the invention, or the working of it by a third party . . .

The above-mentioned terms of priority shall be six months for patents and three months for designs, models, and trade-marks. A month longer is allowed for countries beyond sea.

ARTICLE V.

The introduction by the patentee into the country where the patent has been granted of objects manufactured in any of the states of the Union shall not entail forfeiture.

Nevertheless, the patentee shall remain bound to work (*exploiter*) his patent in conformity with the laws of the country into which he introduces the patented objects (*où il introduit les objets brevetés.*)

[Articles VI.–X. relate exclusively to designs and trade marks.]

ARTICLE XI.

The high contracting parties agree to grant temporary protection to patentable inventions, . . . for articles appearing at official or officially-recognized International Exhibitions.

ARTICLE XII.

Each of the high contracting parties agrees to establish a special government department for industrial property, and a central office for communication to the public of patents. . .

ARTICLE XIII.

An international office shall be organised under the name of 'Bureau International de l'Union pour la Protection de la Propriété Industrielle.' (International Office of the Union for the Protection of Industrial Property.)

This office, the expense of which shall be defrayed by the Governments of all the contracting states, shall be placed

under the high authority of the Central Administration of the Swiss Confederation, and shall work under its supervision. Its functions shall be determined by agreement between the states of the Union.

ARTICLE XIV.

The present Convention shall be submitted to periodical revisions, with a view to introducing improvements calculated to perfect the system of the Union.

To this end conferences shall be successively held in each of the contracting states by delegates of the said states. The next meeting shall take place, in 1885, at Rome.

ARTICLE XV.

It is agreed that the high contracting parties respectively reserve to themselves the right to make separately, as between themselves, special arrangements for the protection of industrial property, in so far as such arrangements do not contravene the provisions of the present Convention.

ARTICLE XVI.

States which have not taken part in the present Convention shall be permitted to adhere to it at their request.

This adhesion shall be notified diplomatically to the Government of the Swiss Confederation, and by the latter to all the others. It shall imply, *de jure*, accession to all the clauses, and admission to all the advantages stipulated by the present Convention.

ARTICLE XVII.

The carrying out of the reciprocal engagements contained in the present Convention is subordinated, in so far as necessary, to the observance of the formalities and rules established by the constitutional laws of those of the high contracting parties who are obliged to elicit their application, which they engage to do as early as possible.

ARTICLE XVIII.

The present Convention shall come into operation within one month after exchange of ratifications, and shall remain in

force for an unlimited time, till the expiry of one year from the date of its denunciation. This denunciation shall be addressed to the Government commissioned to receive adhesions. It shall only affect the state which shall have denounced the Convention—the Convention remaining intact for the other contracting parties.

ARTICLE XIX.

The present Convention shall be ratified, and the ratifications of it exchanged in Paris, within one year at the latest.

In witness whereof the respective Plenipotentiaries have signed it, and thereto affixed their seals.

Done at Paris the 20th of March, 1883.

PROTOCOL.

The plenipotentiaries of the contracting states, when signing the accompanying Convention, at the same time signed an explanatory Protocol, the substance of which is as follows:—

1. The words 'industrial property' are to be understood in their broadest sense; they are not to apply simply to industrial products properly so-called, but also to agricultural products (wines, corn, fruits, cattle, &c.), and to mineral products employed in commerce (mineral waters, &c.).

2. Under the word 'patents' are comprised the various kinds of industrial patents recognised by the legislation of the contracting states, such as improvement patents, &c.

3. The last paragraph of Article II. does not affect the legislation of the contracting states, relating to legal procedure, jurisdiction, &c.

4. Paragraph 1 of Article VI. is to be understood as meaning that no trade mark shall be excluded from protection in any state of the Union, because it does not satisfy, in regard to the signs composing it, the conditions of the legislation of that state, provided that on this point it comply with the legal requirements of the country of origin, and that it had been properly registered in said country of origin. With this exception, which relates only to the form of the mark, and otherwise reserving the clauses of the other articles of the

Convention, the internal legislation of each state remains in force.

To avoid misconstruction, it is agreed that the use of public armorial bearings and decorations may be taken to be contrary to public order in the sense of last paragraph of Article VI.

5. Each country of the Union shall publish, if practicable, an official newspaper, in connection with the special government department mentioned in Article XII.

6. This paragraph relates to the working of the International Office at Berne, the expense of which is to be divided in a given proportion amongst the several states forming the Union.

7. The present Protocol, which shall be ratified along with the Convention, shall have the same force, validity, and duration as the Convention itself.

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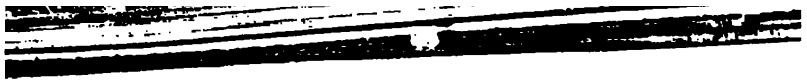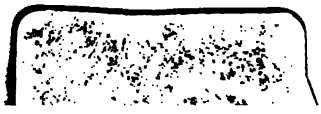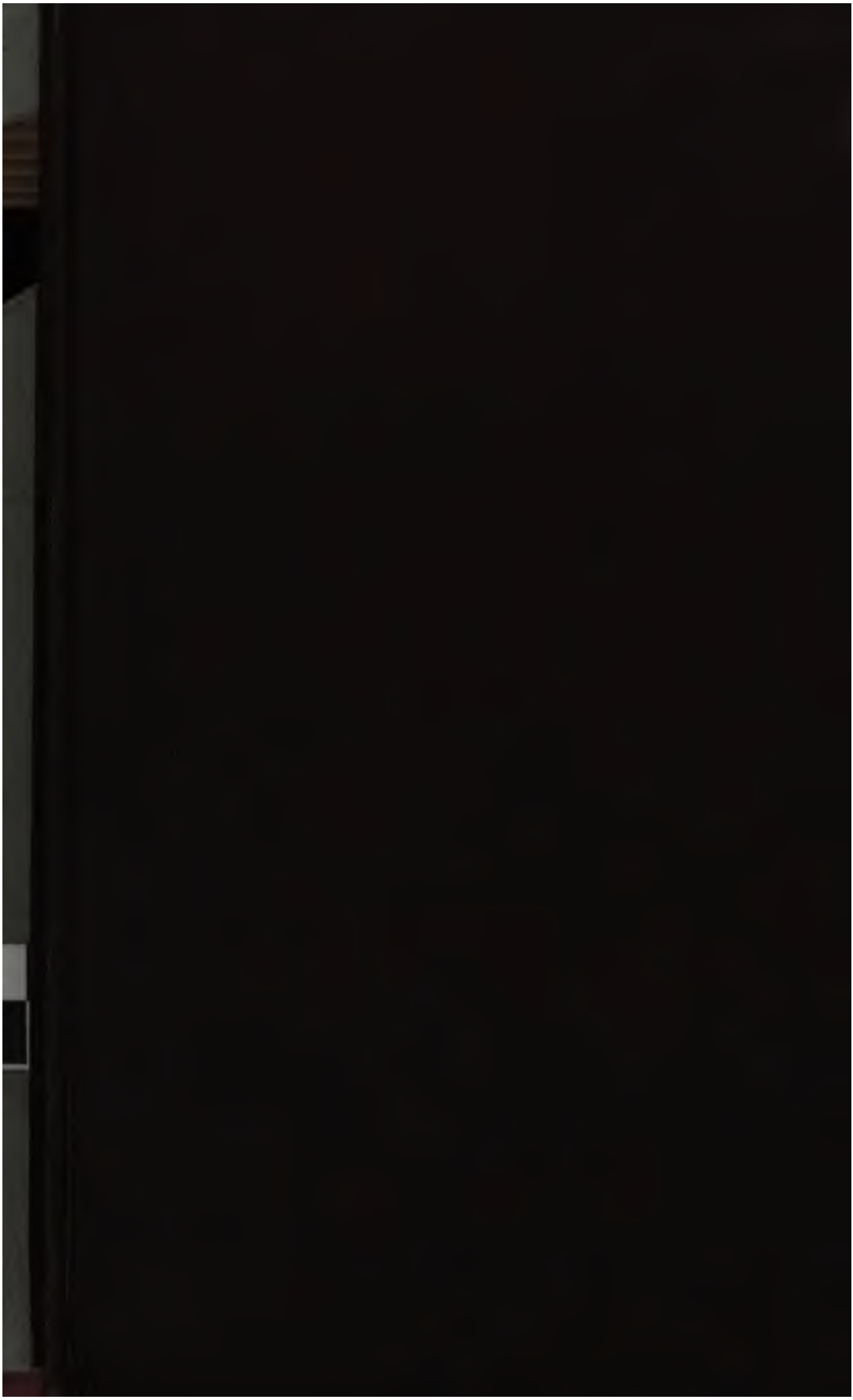
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